THE AMERICAN

MEDICAL MONTHLY.

JUNE, 1862.

LECTURES, MONOGRAPHS, AND CASES.

A Clinical Lecture on Paraplegia. By T. Gaillard Thomas, M.D., Physician to Bellevue Hospital.

During my present term of service, gentlemen, I have shown you a number of cases of paralysis due to organic disease of the spinal cord. Among these, you have seen cases of acute and chronic softening, of congestion, and one case of a tumor pressing upon the cord. The experience which you have obtained by observation of these cases has taught you how serious any one of them is apt to prove to the process of innervation, and in several instances you have seen fatal terminations occur.

Quite a number of cases of paraplegia, due to some serious lesion of the cord, remain, which I have not yet shown; but I will delay doing so, and will to-day bring to your attention cases of that affection due to functional derangement of the cord. I would preface the investigation of these cases by remarking, that paraplegia is a paralysis of the lower limbs, due to a disordered state of the spinal cord, and that this disorder may be either organic (implicating the integrity of the cord itself) or functional, (involving merely a temporary departure from the physiological action of this important part.)

That these two varieties of paraplegia exist entirely distinct the one from the other, and that their pathology, etiology, prognosis and treatment are essentially different, I think that I can give you abun-

dant proof by developing the material in our service, and to that end I will now proceed. The great difference between functional and organic paraplegia has long been recognized, but of late years very much has been added to our knowledge on the subject by the labors of Brown-Séquard. The nomenclature which I have here given you is not that adopted by him, he having applied the name reflex paraplegia to that variety which I term functional, regarding the derangement in the cord as generally due to some irritation reflected upon it from another part. Undoubtedly this is often true, but I so much prefer the generic term "functional paralysis" for such cases, making the "reflex paralysis" a species, that I shall here use it.

It is evidently of great importance, as soon as we are called to a case of paraplegia, to be able to say with positiveness whether it be of organic or functional variety. Generally, this will be attainable, but in some cases time only can decide whether or not the structure of the cord be affected. But all these points will be more clearly defined and illustrated by the investigation of some of the cases in the service. First, I call your attention to Rosanna McAtee, a native of Ireland, single, aged 20, who was admitted here on the 4th of May, 1860. She tells us that two years before her admission, up to which time she had been perfectly healthy, she began to suffer from pain in the head and dizziness. After these symptoms had continued for some weeks, she was much surprised to find that in mounting the stairs her knees gave way under her, and that in the dark or with her eyes closed, she would totter very much in walking. Soon after, the sense of touch became much impaired in her feet and in the right hand, which she thinks was at that time feeble. Still she continued her avocation of servant-girl. Gradually, however, she became weaker and weaker in the legs, and after six months had elapsed, was forced to give up her situation as domestic. For eighteen months more she continued to fail, and on the date above mentioned, entered here in the following state, as noted by the House-Physician in charge of the wards:

"When she entered the hospital she was totally unable to walk, and could stand with great difficulty; on attempting to bear her weight on her limbs, she was "seized with a trembling," which soon compelled her to sit down. The power of grasping with the right hand was almost lost; with the left she could exert a feeble pressure. No point of tenderness could be discovered over the spine. There was no difficulty in urination; her bowels were regular; her general health good.

"There has been no pain in the back, no sensation as of a band

passed around the body, no spasm, no trouble about the sphincters, no sense of prickling or formication, no great fall of temperature in the paralyzed limbs, and the paralysis has never been complete."

Now I do not pretend to offer you this as a type of the class of which I have been speaking; its duration has been unusually long for functional paraplegia; but I am convinced that it is of that class, and feeling so, shall venture a favorable prognosis concerning it, and adopt a course of treatment which would be injurious if the cord be diseased.

But you may ask, What are the grounds for my conviction? I do not know that I could better give them than in the following tabulated comparison of the two varieties of disease which are engaging our attention. All the evidence, you will see, is in favor of my conclusion; were it otherwise, so would that conclusion have been.

Organic Paraplegia.	*Functional Paraplegia.*
1. Comes on suddenly, and is more or less complete.	1. Comes on gradually, and is always partial.
2. There is pain in back, extending down the legs and around the body.	2. No fixed pain in back or legs, and no "band" around body.
3. Passing ice or hot water down spine gives great pain.	3. None is experienced.
4. Jerking or spasm of muscles of legs exists.	4. None.
5. Bladder and rectum are affected.	5. Not so.
6. Prickling and formication occur.	6. None.
7. As time passes the paralysis becomes worse.	7. As time passes it diminishes.
8. There is great tendency to bed-sores.	8. None whatever.
9. Extremities are colder than normal.	9. Temperature normal.
10. Sensibility impaired.	10. Not so to any great degree.
11. Muscular enfeeblement is strictly confined to the lower limbs.	11. There is often a tendency to enfeeblement of upper limbs.

In speaking of the treatment of organic paraplegia, I told you that the indication is to disgorge as much as possible the vessels of the cord, and produce a sedative, quieting effect upon it. In the functional variety the reverse is true; we should endeavor to stimulate the functions and circulation of the cord.

To this end, no drug compares for an instant in value with strych-

nia, and I shall prescribe that here, to be given until a decided constitutional effect is produced. At the same time I shall direct the use of cold shower baths along the spine, and the frequent application of electricity. The patient must be encouraged to exercise the muscles systematically and steadily, and she will receive the best diet which the institution affords. My experience with these cases leads me to hope and believe that under this course she will rapidly recover.

Four months after the above date, the House-Physician's notes state: "Patient has steadily but very slowly improved. She can now stand well without assistance, and can even walk a few steps if allowed time. Her gait is slovenly, but not staggering. She can grasp quite forcibly with both hands, though she says the right feels weaker than the left. Her general health has been good all the time."

What the cause of this girl's paralysis was and is, I am entirely unable to tell you, as after a careful search I have been able to find nothing in any way offering an explanation of it. The general causes for this variety of paraplegia are these:

1. Blood poisoning, *e. g.:* Syphilis, Lead, Arsenic, Diphtheria.

2. Intense irritation of any part of the nervous system, *e. g.:* Worms, Dentition, Disease of genito-urinary system, and any acute affection.

3. Hysteria.

4. Great impoverishment of the blood, as after malarious fevers, parturition, &c., &c.

From all of these I have seen paralysis occur, and from most of them paraplegia. Of several I will proceed to show you examples; and with reference to those which I shall not to-day illustrate, I will merely say that abundant evidence exists in the literature of the profession and my own experience for enumerating them.

CASE II.—Rebecca M., æt. 24, married, a native of Ireland, admitted to the hospital in May, 1861. The patient entered in the second stage of phthisis, but was able for two months after admission to walk about with perfect ease. About four months ago she observed that her feet dragged on the floor, that her knees refused to bear her in mounting the stairs, and that sensibility in the lower limbs was becoming rapidly impaired. These symptoms, unaccompanied by others, went on increasing, until she became unable to stand or walk.

Upon a careful exploration, I find unmistakable evidences of syphilitic disease, in the form of nodes, enlarged glands, &c., &c.; and as I can discover no other cause for this paralysis, which I am of opinion (for reasons which it would be useless to repeat) is functional, I

am led to regard this poison as the cause of the trouble. I shall order for her iodide of potassium, in five-grain doses, to be repeated three times a day, regular and systematized exercise of the muscles, the douche to the spine, and good diet. Her pulmonary difficulty advances but slowly, and is not, I think, connected with the nervous disorder as a cause.*

I will relate to you in this connection a case which occurred in private practice.

Case III.—M. B., a robust, handsome boy, four years old, was suddenly taken in Nov., 1861, with acute rheumatism, which ran its usual course in about three weeks, leaving the heart unaffected. While convalescing from this, he was seized with pneumonia, from which he was exceedingly ill, but in two weeks recovered. He then contracted a violent and very peculiar coryza, from which he suffered severely for between three and four weeks. It was not diphtheritic in its nature. This having passed off, I encouraged my little patient to rise, but, to my surprise, found that his lower limbs were almost entirely paralyzed, and the upper ones considerably enfeebled. He was unable to stand even for a second, and lifted the feet with great difficulty. Dr. Metcalfe saw the patient with me at this time, and agreed in the propriety of its being regarded as a case of paralysis due to a derangement of the spinal cord, merely functional in its nature.

The child was put upon the use of ext. nucis vomicæ, was bathed twice daily with salt water, and encouraged to move the limbs as much as possible. The attack slowly passed off, and he in a few months recovered entirely. Whether this paralysis was due, as Brown-Séquard would probably have thought, to the rheumatic or pneumonic inflammation, or to the toxæmia resulting from the series of diseases from which the little fellow suffered, I am unable to say; but my belief was then, and is now, that the latter was the more probable solution to the problem.

The last case which I shall show you to-day is one of great interest to me, as it presents one of the most perfect instances of the "reflex paraplegia" of Brown-Séquard that I have ever met with.

Case IV.—Mary Lewis, born in Ohio, æt. 23 years, married, admitted to the hospital on the 14th of April. The patient enjoyed perfectly good health until about six weeks ago, when she was attacked by acute dysentery, which was accompanied by constant nau-

* This patient subsequently recovered entirely, and is now in the wards of Bellevue for phthisis.

sea and vomiting. After this had lasted for a week, she noticed a prickling sensation in the legs, and found herself growing gradually feeble in these members. In about three weeks from this time she became almost entirely paraplegic, so as not to be able to walk without great assistance; as I now direct her to stand, you observe that she sways to and fro, and every now and then seems about to fall, which she would do, if not prevented by firm support. Her left arm has likewise become somewhat, though not a great deal, enfeebled. Besides the symptoms mentioned, she has none pointing towards the spinal cord; there is no trouble about the bladder or rectum, and only for a week has pain in the back been complained of. The dysentery still continues, although not with its former violence.

This case I regard, gentlemen, as a good type of the reflex paralysis of Séquard. What the absolute connection is between the ulcerations in the large intestine (or, at least, the inflammation there,) and the enfeeblement of the muscular system, I am not prepared to say, for I am free to confess a great degree of skepticism as to the hypotheses of Brown-Séquard on the subject; still, in the present state of pathology, I know of no better way of dealing with this case of functional paraplegia than by classing it with the reflex variety of that eminent investigator.

The treatment which I shall adopt in this case will be entirely directed to the dysenteric trouble. If, as I suppose, the other is secondary to this, it may pass off without treatment; should it not do so, it shall engage our attention at a future period.

May 14th.—I show you again the patient Mary Lewis. She has now entirely recovered from the dysentery, and the paraplegia has so far passed off that she can stand and walk across the floor without assistance. When in the presence of Drs. Flint and Clark, she was this morning demonstrating her ability to walk; I requested her to shut her eyes, and she suddenly and violently fell to the floor. She can stand without difficulty with her eyes open, but the instant that she shuts them she falls as if shot through the head. This curious pathological phenomenon I have noticed in a number of cases of functional paraplegia; so commonly, indeed, that I am now inquiring, by clinical investigation, whether it be not diagnostic of this variety, at least to a limited degree.*

* This patient is now in Ward 27, bed No. 3, Bellevue Hospital, and may be at any time seen by any one interested in its history.

Some time ago, a male patient suffering from phthisis and empyema in this hospital, was affected by paraplegia, which was regarded by the physicians of the service in which he was as organic. One day Dr. Echeverria, in going through the wards, directed him to stand erect (which he could readily do) and close his eyes, when instantly he fell to the floor, as you have seen Mary Lewis do. This being repeated, the same result instantly took place.

The patient died, and a careful autopsy revealed the cord in a perfectly healthy condition; the case having been one, I think, of functional paralysis, perhaps dependent upon irritation reflected from the diseased pulmonary or pleural surfaces; in other words, a case of reflex paraplegia.

Affections of the Lymphatic Ganglia attendant upon Soft Chancres.
By ALFRED L. LOOMIS, M.D., Physician to Bellevue Hospital.

There are two recognized affections of the lymphatic ganglia attendant upon soft chancres. These depend upon distinct causes, and in the phenomena which attend their development and their termination there is a marked difference. One is a simple inflammation of a lymphatic gland, produced by irritation; the other is the result of the direct absorption of pus from the surface of the chancre, which is arrested in its progress by the ganglion nearest the seat of the chancre.

The ganglia involved in either case are always the superficial. Symptomatic or non-specific adenitis may be developed at any time during the progress of a soft chancre, but usually its appearance is immediately preceded by the chancre's taking on an inflammatory character. It may terminate in resolution, or it may suppurate, and its diagnostic characteristics are—that it is slow in its development, and unattended with pain; the gland enlarges, but presents little disposition to suppurate; it is soft; the integument over it is freely movable; if suppuration occurs, it is indolent in its character, and the pus furnished will not produce a chancre by inoculation—in a word, in its main features, it closely resembles ordinary strumous adenitis.

Specific or virulent adenitis depends upon the presence of virulent pus in the meshes of the ganglia; in fact, it is a chancre of the gland, and on account of the presence of the chancrous virus, suppuration and entire destruction of the gland is inevitable. As a rule, but a single gland is involved, and the prominent facts in regard to this form of adenitis are, that the gland enlarges rapidly, is painful and tender from the commencement; its progress is rapid, involving the tissues

around the gland; it suppurates and opens spontaneously, early furnishing inoculable pus, and is liable to all the accidents to which a soft chancre is subject. I have thus briefly noticed the main features of these two varieties of adenitis, in order that I might the more clearly speak of their treatment.

About eighteen months since, entering upon my term of service at the Island Hospital, I was astonished at the large number of what were termed chronic buboes in my wards. After a careful examination of each individual case, I found that a large proportion presented evidences of having been specific in character, and some of these, although they had existed five and six months, still furnished inoculable pus. Others, with histories and appearances indicating their non-virulent character, under a series of poultices, had formed sinuses in a mass of indurated ganglia that had been discharging (the patient being almost constantly in a recumbent posture) for six and twelve months.

The best method to be pursued in the management of these affections of the ganglia, especially at their commencement, has been a practical study with me since that time.

On consulting authorities, I found that all who recognized the wide differences between the infecting and non-infecting chancre, also made a distinction between virulent and non-virulent adenitis as a complication of non-infecting (or soft) chancres; and that while all admitted that in non-virulent adenitis suppuration ought to be avoided, in virulent it was a necessity; but in relation to the best mode of procedure in order to avoid it in the one case, and to terminate it in the other, there was a decided difference of opinion.

In considering the treatment of these affections of the ganglia, I shall not enter into a detailed account of the various methods of procedure that have been recommended by different writers upon this subject, but briefly describe those which, after an impartial trial, I have found most efficacious.

In the management of non-virulent adenitis, the most important point is to prevent suppuration. This may be accomplished in the majority of instances by compression; if tenderness of the glands prevent the immediate application of the compress, apply the saturated tinct. of aconite for a few hours; then apply firmly by means of a spica bandage a hard pad of sufficient size and shape to press evenly over the whole of the gland involved. Enjoin absolute rest and a non-stimulating diet. Subdue the inflammatory condition of the chancre (which is usually present) by opiate lotions, and at the end of a week, usually, the adenitis will be arrested.

If suppuration has already occurred, open the abscess by a crucial incision at its lower border; fill the cavity with lint, over which apply compressed sponge by means of a spica bandage, which for a few days must be kept wet with tepid water, (changing the dressing each day.) As soon as the tenderness in the part has disappeared, apply the hard pad in such a manner that the pressure will be made from above downward; in two or three weeks the recovery will be complete. If the internal use of tonics is indicated, the ferri iodidum is preferred.

In the treatment of virulent or specific adenitis, it must be remembered that suppuration and the entire destruction of the gland are inevitable, and that before resolution can take place its entire removal must be accomplished, either by a slow suppurative process, or by surgical interference.

As soon as the character of the adenitis is determined, (which, by the rules before stated in most cases, can be done early,) the suppurative process should be hastened by poultices. When the integument over the gland becomes thin and shiny, with a scalpel remove an elliptical portion of the integument of sufficient size to expose the surface of the gland; in many cases the gland will be found isolated from the surrounding tissues by the suppurative process, and attached (as it were) only by a pedicle at its base, in which case it is easily removed with the finger or handle of the scalpel; at other times its removal will be found more difficult, and sometimes it will be found necessary to remove it in separate portions by means of ligatures; but in any event, the entire gland involved should be removed. When this is carefully done, a simple ulcer remains, which heals by granulation with amazing rapidity; and we have accomplished in a few weeks what otherwise often involves months. Before exsecting a gland in the manner described, the character of the adenitis should be accurately determined; and unless its virulence has been decided by a chancre resulting from the inoculation of the pus furnished by the gland involved, it should not be attempted. The removal of a gland in non-virulent adenitis greatly complicates the case, and I have seen very troublesome sinuses result from exsecting glands. Where this mistake had been made, not unfrequently the ulcer remaining after the removal of a gland assumes a chancrous character, when it should be treated in every way like a soft chancre. Every case of adenitis complicating non-virulent chancre that has come under my observation the past year, in which the principles of treatment above detailed have been rigidly followed, (where no syphilitic taint was present,) complete recovery has resulted within three months from the com-

mencement of the adenitis, and in the majority of cases within four weeks.

(To be continued.)

Fermentation as a Cause of Disease. By M. POLLI, of Milan.

The chemists, who have lately studied with the greatest success the phenomena of fermentation, have observed that this process has an importance much greater than could have been imagined. In fact, it is by fermentation that we explain the spontaneous decompositions of vegetable and animal tissues, such as dry putrefaction, eremacausis, gangrene, &c., and the whole series of successive transformations which organic substances undergo until they are converted into water, carbonic acid, ammonia, and inorganic substances. In consequence of fermentation, fatty bodies furnish us glycerine, salicine, and glucose; myronate of potassa is converted into the essential oil of mustard; neutral substances, such as urea and allantoin, evolve ammonia; and amygdalin produces the poisonous substances, essential oil of bitter almonds, and prussic acid.

Ferments act either by contact or *catalysis*. They are sometimes living beings, and sometimes very active substances, which are not even organized. Diastase, emulsin, pepsin, play the part of ferments. They can split up, (*dédoubler*,) hydrate, or render isomeric organic substances.

There is a great analogy between the processes of fermentation and some of the organic metamorphoses which preside over certain maladies. Given an albuminoid substance, which, in a particular stage of change, will act as a ferment, and particular substances, which are the results of such action, and here is the foundation of the humoral theory explained by well-studied chemical facts.*

But analogy is not sufficient; it has been demonstrated by experiments thoroughly made, that the blood experiences, in certain diseases, alterations and variations in its composition, and that we may produce an artificial disease which will present a wonderful resemblance to natural diseases, by injecting into the blood-vessels substances capable

* According to Pasteur, the ferment is not an albuminous substance altered by oxygen, but an organized being, whose germ exists in the air. The presence of albuminous matters is an indispensable condition of all fermentation, because the ferment needs such substances for its development.

of acting as ferments. The numerous abscesses produced by the injection of pus into the veins of dogs; the septic affections caused by the injection of putrid purulent substances into the veins of animals; the diseases, presenting all the characteristics of typhoid fever which can be provoked, by the injection of putrefied blood into the circulation; in fine, contagious diseases, such as glanders, which are produced by the admission of an infecting substance;—these are facts which prove that one can produce a constitutional affection by the simple introduction into the blood of a substance capable of playing the part of a ferment. There are some diseases proceeding from a morbific ferment which might be styled *catalytic* diseases, in which the morbific matter, producing metamorphoses from contact with the alterable principles of the blood, is the first cause of all the symptoms which the animal economy presents. Finally, it is not possible to deny that fermentation may be produced in the blood.

But admitting as an initial point, in many diseases, the action of a specific ferment in the blood, is it possible to prevent its effects, to render it inactive in the living body, as we can by means of many chemical agents outside of the organism? This is the principal point which gives interest to this pathological question.

M. Polli thinks that he has shown, by a series of facts and conclusive experiments, that it is possible to neutralize morbific ferments in the blood of animals by chemical substances, which will not alter the blood so much as to be incompatible with life, and that it is through the employment of such substances that one may hope to treat successfully all diseases whose primary cause is fermentation.

We know that sulphurous acid gas prevents alcoholic and acetic fermentations, and that it is also an obstacle to the fermentation of animal substances, and of all organic substances in general. Thus it arrests, even after the commencement of the process, the fermentation which the saliva and diastase produce when brought into contact with starch, that which myronin determines in the paste of black mustard, that which emulsin produces in the amygdalin of bitter almonds, etc.

M. Polli has discovered that the alkaline and earthy sulphites enjoy the same antiseptic and decolorizing properties. This fact is very important, since it allows of the employment of sulphurous acid in therapeutics. He believes that he has also discovered that the action of sulphurous acid and the sulphites on coloring matters, as well as on ferments, is not a deoxygenating process, nor a combination, nor a destructive process, but simply a molecular modification.

This *modus operandi* of sulphurous acid and the sulphites would give a suitable explanation of the precious property possessed by these chemical preparations, of preventing or energetically arresting the action of morbific ferments artificially introduced into the blood of animals without altering the composition of the latter in such a manner as to be incompatible with life.

Polli, after a large number of experiments on dogs, has determined the dose of the sulphites which can be internally administered, the metamorphoses these undergo in the organism, and their curative action in affections produced by the injection of putrid or contagious matters into the blood.

1. Ten grammes of sulphite of soda were given to a dog during five days; then a drachm of pus was injected into the femoral vein. The animal appeared sad, and refused the food which was offered it, but on the next day it regained its liveliness and ate voluntarily. Two days afterwards the same experiment was commenced, with the same results. At the end of some days the animal was perfectly cured.

2. On two occasions a gramme of pus was injected into the veins of another dog more robust than the preceding. The animal was sad; the next day it took food; the day following it was dejected, the respiration difficult, the wounds were sanious, the left leg and foot became swollen, and it died ten days afterwards.

3. An equal quantity of putrid blood was injected into the veins of three dogs; one died five hours after the injection, another after five days of sickness, and the third, who had taken sulphite of soda, experienced no uneasiness, and was cured rapidly.

4. A large number of other experiments, made with putrid blood and the mucus of glanders, showed that the animals died with all the symptoms of general infection whenever they were not treated with sulphite of soda, and that they were saved whenever they were put under the influence of this medicament.

If these facts should be confirmed by other experiments, M. Polli will have rendered an immense service to therapeutics, and will have cast some light on the cause—as yet so obscure—of a large number of diseases.—*(Jour. de Phar. et de Chim.)* L. H. S.

Transactions of the Medical Society of the County of Kings.

AUGUST, 1861.

Dr. JONES read the following case:

James Dolan, aged 18 years, residing in Bolivar Street, Brooklyn, was struck with a stone, thrown by a negro boy, on the lower jaw, in the summer of 1854, causing him to fall senseless; in which condition he remained until after his arrival at home, to which he was carried, a period of perhaps half an hour. His face was much swollen at this time, and although the swelling somewhat diminished at first, it never entirely disappeared, but rather slowly, after about one year, increased, and was very extensively enlarged at the time he came under my charge, in January, 1859. He was quite delirious for several days immediately after the occurrence of the injury.

He had been attended by several physicians both in and out of the hospital, and had been treated by domestic remedies and quack preparations without limit—even those prescribed by the seventh son of a seventh child.

In January of 1859, I found him much emaciated; his head forced over to the left shoulder by the enlargement of the right side of the face and neck; several sinuses were established along the body, and one very large one at the angle of the jaw; the discharge therefrom being ichorous, fœtid, and excoriating the surface whenever it came into contact with it; some of his teeth on the affected side had fallen out, and all were loose, which, with some difficulty owing to his inability to open his mouth more than a quarter of an inch, were extracted. Cicatrices had produced considerable deformity about the neck; his bowels were irregular; appetite variable; tongue loaded; sordes on the teeth; and, from symptoms present, he was evidently suffering from constitutional irritation.

After carefully examining the case, I concluded that a large portion of the left jaw was necrosed, and that caries existed to such an extent, that unless arrested, the entire jaw would be lost, unless death would anticipate such an event.

The patient was therefore placed under constitutional treatment, for the purpose of preparing him for an explorative operation.

On the 14th of February, three weeks from the time I first saw him, I deemed it expedient to proceed with the operation. I was very kindly and efficiently assisted by Andrew Otterson, M.D., A. T. Pearsall, and R. M. Deering, my students, and Mr. Wheeler.

The patient was placed under an anæsthetic, consisting of two

parts of sulphuric ether and one of chloroform, and the operation commenced by making an incision along the base of the jaw, from its angle to the canine tooth, in a circular direction, down to the bone. The soft parts were then carefully separated from the bone on all sides; in some places they were loose, and others firmly attached; perforations had taken place in several parts of the bone, corresponding to the sinuses in the soft parts.

The walls of the body of the bone were very thin; in some places soft, in others brittle.

The incision was continued from the angle, along the ramus, to the articulation; nearly the entire ramus, with its condyle, being necrosed. I deemed it advisable, under the circumstances, to disarticulate and remove the entire diseased portion of the jaw, which extended from the canine tooth on the right side up to and including the condyle; and as the coronoid process could not be seen without unwarrantable cutting, to ascertain its condition, it was also included, but found, after removal, to be in a healthy condition.

After detaching the soft parts, preserving the periosteum, I sawed through part of the body of the bone, and with Liston's bone forceps cut the balance about opposite to the canine tooth; then everted and depressed the ramus, and disarticulated it. The edges of the perforations in the periosteum were carefully trimmed; the entire cavity thoroughly cleansed; the edges of the wound were brought together by sutures, rather loosely applied, and adhesive plaster. The patient was placed under the influence of opium, and cold-water dressing applied. Union by first intention took place, in several places, along the line of incision, although there was considerable tumefaction, sufficient to tear out the sutures from the inferior margin of the wound, in less than twenty-four hours. Both eyes were closed for about forty hours. The swelling then gradually diminished, but did not disappear for at least two months; after which, I did not see the patient until July, 1861.

The sinuses were thoroughly cleansed at the time of the operation, lint pledgets inserted into them after the lapse of about one week, and as soon as reparative action was evinced, they were discontinued.

The case progressed rapidly and favorably; he was confined to his bed about one week, walked out at the end of two, and was enabled to go to work in about one month's time.

I am of the opinion that this disease was caused by the blow from the stone thrown by the negro boy; the injury done by this violence produced an inflammation of the periosteum, medullary tissue and

bone, and that caries of the bone was the consequence; this caries being associated with, and followed by, necrosis.

Nature has been very kind and conservative in this case. Since the operation she has thrown out a substance of a bony-like consistence, as a substitute for that part of the jaw removed; the form has been remarkably preserved, and the contour of the face very little altered.

I present the patient for your examination. The removed part of the jaw lies on the table for your inspection.

Dr. J. G. JOHNSON stated that Dr. Jones's case was interesting, as showing the readiness with which new bone was formed in children, where the necrosed portion had been removed and the periosteum left. At the April meeting of this Society, Dr. Johnson had presented a case where complete and rapid restoration of the bone had followed the removal of nearly one-half of the inferior maxilla for necrosis in a little girl of five years. Dr. E. S. Cooper, of San Francisco, had published a similar case in a child. It was well known that this reparative process would take place in the adult; but these cases were of interest from the readiness with which the reparative process takes place at a time when the ossific matter in the system is less than at more mature life, as well as from the slight causes which were sufficient to induce necrosis in the young subject.

Dr. JONES inquired whether this new material was really bone. Dr. Enos thought it was. It is well established that the various parts of the bone produce bone; thus, not only the periosteum, but the endosteum and the medullary matter. French writers have shown that if the periosteum is raised from the bone and carried into the belly of a muscle, it will produce bone in its new situation. Dr. Enos had repeated this experiment upon the femur of a rabbit, with like result. The soft parts will also, under certain circumstances, throw out ossific matter.

Dr. ENOS had a case where the fractured ends of a bone had been separated for more than an inch, and union had taken place where the new bone must have been thrown out by the muscles.

Dr. HAWLEY'S singular case of paralysis, which has been heretofore mentioned, has entirely recovered, under the use of *tonics and electro-magnetism.*

Dr. NORTH reported a case of intermittent cholera morbus. The patient, a middle-aged married woman, not pregnant, was attacked every morning about seven o'clock with severe vomiting, purging, and great prostration, lasting from one to three hours, and then getting

better until the following morning; the paroxysms continued for some two weeks, in spite of opiates, astringents, antacids, and cathartics; when, upon the administration of quinine during the intervals, the attacks assumed the regular form of chills and fever, and then yielded entirely to the further use of the tonics.

Dr. NORTH stated, as his opinion, that it was a *rule* of obstetricians, that a pregnant woman, if attacked with the variolous disease, might be expected to abort, (or miscarry,) and cited two cases which had lately come under his notice of varioloid attacking pregnant women: one aborted five weeks after the varioloid, while the other was an exception to the rule, and went her time.

Dr. SMITH thought *facts* would not establish any such rule, thinking it doubtful whether, in the case mentioned by Dr. North, the abortion was caused by the variolous disease; believing, if such had been the case, the result would have followed the cause sooner; and that if the child had died as the result of the varioloid, five weeks before, it must have shown signs of disorganization and decay; stating, also, that he could then call to mind three cases where women pretty well advanced in pregnancy had passed through varioloid and passed on to confinement at full term, and he distinctly recollects revaccinating the children without effect.

Dr. HAWLEY mentioned the case of a patient of his, in which the uterus retained the placenta six full weeks after the expulsion of the fœtus; that it was then thrown off, with contractions simulating regular labor. Not the least decomposition had taken place in the placenta.

Dr. BRADY reported two apparently *mild* cases of cholera infantum, which were rapidly fatal, from a complication of diphtheria. Dr. Brady related the history of a case of diphtheria, where the patient, a little boy, was taken with sudden coughing and choking, and a moderate amount of the peculiar deposit in the pharynx, enlargement of the glands, &c., which lasted for some five days, and then seemed to improve in the throat and proceed *downward;* and after a few days the patient began to expectorate, and the Dr. says he expectorated "*pints of matter daily*" for some three weeks, and finally recovered.

Several members stated their general mode of treatment for cholera infantum.

Dr. O. H. SMITH gave very little medicine internally, but depended more upon regulating the diet, giving, if possible, milk from one cow, diluted with one-half water, and sweetened with loaf sugar, *but did not allow the milk to be boiled;* sometimes used Borden's condensed

milk, one part to eight of water. His medicines were the usual absorbents and antacids, with rhatany as an astringent; and sometimes minute doses of Dover's powder. As a favorite *external* application, he directed a "*ginger paste*" to be applied to the abdomen, to remain long enough to produce a decided redness of the surface, and to be repeated often enough to keep up a gentle irritation and warmth of the skin. This, together with cool applications to the head, and *gin* as a stimulus, if stimulants were needed, and to have the child *much in the open air*, constituted the main points in a treatment with which he was very well satisfied.

Dr. BRADY followed a similar plan as to the cure of the patient and the general treatment; but when first called, to control the vomiting, he usually ordered a grain of calomel to be well rubbed up with 12 grs. of sugar, and divided in 6 powders, one to be given every four hours, *dry, upon the tongue;* if the discharges from the bowels were very frequent, he gave about ½ of a grain of opium with the calomel; if the vomiting does not yield to the calomel, he gives (to a child a year old) about ⅛ of a drop of hydrocyanic acid, with small doses of the Tr. opii. As an irritant to the bowels externally, Dr. Brady uses turpentine, with camphorated oil. A favorite nourishment is raw beef.

Dr. HAWLEY usually relies upon some form of an opiate for the discharges from the bowels, and creosote for the vomiting. General hygienic treatment the same as that just described.

Dr. NORTH had nothing peculiar in his treatment, unless it was bathing, or rather *rubbing*, the bowels often with a liniment made of equal parts of castor oil and laudanum, and keeping the abdomen warm with a flannel bandage.

REGULAR MEETING, SEPTEMBER, 1861.

Dr. HEUSER remarked that twelve days ago he vaccinated a girl 25 years of age. The vesicle developed well. She had been previously vaccinated in Germany, where a certificate must be shown when one enters school, or applies for confirmation, or is about to be married. Two days ago varioloid made its appearance. He had seen several cases of simultaneous appearance of vaccinia and variola.

Dr. HART, in 1828, vaccinated mother and two children in the same family. One of the children soon after had a mild attack of varioloid.

Dr. CONKLING vaccinated a child, small-pox being in the neighborhood. Four weeks after, the child died with the confluent disease.

Six months ago, another child vaccinated by him with the scab, had variola, but recovered.

Dr. BURGE related a case in which he vaccinated the same child nine times without effect, in several instances using fresh virus taken directly from the vesicle, and inserted without delay. Feeling sure that the child was not susceptible to the poison of the variolous disease, he assured the mother that he was as safe as though the vaccination had taken. The case occurred in New York. Moving thence to Brooklyn, the Doctor lost sight of the family for five years, when, meeting the mother casually, he asked after the little boy. "Oh!" said she, "he died of small-pox two years ago."

Dr. HEUSER remarked, that though the protection afforded by vaccination had been questioned in Germany, and the whole subject passed through a severe ordeal of public discussion, vaccinia as a prophylactic was now established by new and undoubted statistics.

Dr. HEUSER said he had recently been much annoyed by the grave character of a class of cases which had generally given him but little trouble. He had lost three nursing infants; one dying thirty-six hours, and another the third day after the attack commenced. Discharges loose; light colored; no blood; pain violent.

Dr. HART was called some weeks since to see a lady who had fallen down stairs, striking upon her head. There was blood oozing in considerable quantity from the left ear, and also an inch or two below the ear, a white matter, which he believed to be cerebral. Some of the same was also found mixed with blood upon the stairs. No fracture could be discovered; patient was unconscious; pulse 44; she died the same night. Dr. Hart thought a post-mortem would have been interesting in this case, to show whether a previously undiscoverable fracture really existed *above* the base of the skull. It was prevented by the summary proceedings of the coroner.

The subject of hæmorrhage from the ear, as a symptom of fracture at the base of the skull, was discussed, and the opinion generally expressed that it was in itself no evidence of such fracture.

Dr. CONKLING thought an exudation of serous fluid a certain symptom.

Dr. BURGE was called to see a lad 14 years of age, who had fallen eight feet, striking upon the vertex; was taken up insensible, and conveyed to his house, when consciousness gradually returned. Hæmorrhage from the right ear was rather profuse. No active treatment of any kind was instituted. Such directions only were given as relate to the general care of the patient, absence of noise, exclusion of strong

light, mild diet, &c. Recovery was rapid, and without an untoward symptom.

Dr. HART desired to know if the gentlemen had had any experience of the use of persulphate of iron in hæmoptysis. In one case he had ordered ten drops of the liquor every hour; hæmorrhage ceased after the first dose.

In hæmoptysis, Dr. CONKLING relied upon gallic acid, five to ten grains, every two to four hours; he had no confidence in lead and opium.

Dr. BURGE preferred Squibb's fluid extract of ergot to anything else he had used, or seen used. He knew nothing of its *modus operandi*, and would not claim that it was as efficacious in other hæmorrhages as in those from the uterus. In this connection, he spoke of a case of menorrhagia which had continued nearly six weeks, with no treatment except the domestic use of elixir vitriol, and *that* without the slightest benefit. He ordered Squibb's fluid extract of ergot, in half-drachm doses, three times a day, and in twenty-four hours the flow ceased entirely.

Dr. BALL said that among other means, he used with benefit creosote, in two-drop doses, three times a day, in flax-seed tea or gum-water.

Dr. CONKLING related briefly a case of confinement. When he first saw the patient, labor was in the second stage. She was very large, and much bloated. She suffered intensely in the region of the bladder. At her urgent request, chloroform was administered; none, however, was given during the last hour of parturition. The Doctor remained an hour after delivery. At the end of another hour he was recalled, when he found her in convulsions. Bled her twenty ounces —consciousness returned. Soon she seemed to be relapsing, when ether was administered by inhalation. Patient recovered rapidly.

Dr. CONKLING desired to predicate two questions upon this case:

First. Had the patient been bled a week before, would it have lessened the liability to these convulsions? And

Second. Did the chloroform produce them?

Dilatation of Strictures in the Urethra, with a New Instrument. By J. H. HOBART BURGE, M.D.

Mr. President and Gentlemen—Some months ago I had the pleasure of presenting to this Society a new instrument for the dilatation of strictures in the urethra. Since then I have so much improved upon my own device, that I hope there is no presumption in bringing it

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Dilatation of Strictures in the Urethra, with a New Instrument. By J. H. HOBART BURGE, M.D.

Mr. President and Gentlemen—Some months ago I had the pleasure of presenting to this Society a new instrument for the dilatation of strictures in the urethra. Since then I have so much improved upon my own device, that I hope there is no presumption in bringing it

again to your especial notice. To render the subject intelligible to those members who were not present on the former occasion, I will repeat very concisely what I then said. Recognizing the danger of introducing very small instruments into the urethra, and the consequent importance of using the largest that will pass without violence, I attempted to show that in actual practice the greatest obstacle to success was to be found in the inefficiency of the mechanical means at our command; that, in order to decide what instrument was of the proper size to enter or pass the stricture, it was necessary to try successively several sizes, of course irritating the sensitive parts more and more at each introduction and withdrawal, or else, on the other hand, to select one so minute as to endanger the integrity of the mucous lining of the canal, and perhaps increase the difficulty we were called to relieve. It then became obvious that the great desideratum was an instrument which would enable us to feel our way safely from point to point, changing its size as occasion might require, without danger to any part, and obviating entirely the necessity of withdrawing it till the operation was completed. This was the problem which I proposed to myself, and the solution of it is in the instrument which I now exhibit. It consists of several concentric cylinders, curved in the

arc of a circle. The external or largest cylinder being about the size of No. 10 catheter, and the internal or smallest about the size of No. 2. The smaller sizes are all projected at will by means of the knobs near the handle. The design is to carry the instrument *in full size* to the point of stricture. The moment the obstruction is felt, the largest of the *contained* cylinders is to be advanced till it in turn meets with some obstruction, when, in like manner, the next size must be pushed forward, and so on, always from *larger* to *smaller*, till the stricture is passed. To prevent misapprehension, I contrasted this instrument with that of Whakely, which consists of a style and several separate cylinders; the design being, first, to introduce the style, and then, successively, the cylinders upon the style, always proceeding from *smaller* to *larger;* which instrument, though it possesses some

advantages over the ordinary bougies, inasmuch as it obviates the necessity of frequent introduction and withdrawal, is practically the exact opposite of mine, and involves all the danger of injury to the passage which attends the use of a fine instrument with nothing to guide it in the way it should go. To be sure, the style once introduced is a sure guide to the cylinders sliding thereon; but the difficulty consists in safely introducing the style, which of necessity is very small. It is clear to my mind, that even in those cases in which recourse must be had to the finest instruments ever used, there is great advantage in gently dilating the canal all the way down to the stricture, and especially just where the contraction begins, thus removing any folds of membrane which might otherwise engage the point of your instrument. By the larger cylinders of this multiple bougie, this dilatation is effected and maintained, while the smaller are safely guided by them in the proper direction. When I first asked your attention to this instrument, a style occupied its centre, and filled completely the smallest of these cylinders. *That* I have caused to be removed, and a bore to be made in the handle continuous with the canal thus formed, so that when the stricture is passed, the patient may have instant relief from a distended bladder. Lest the smallest of these cylinders should prove, as it sometimes doubtless will, too large to enter, I have provided an independent style of sufficient length to pass through the handle and emerge at the point. This, of course, is to be used without withdrawing the instrument. If the use of the style become necessary in a given case, and with it we succeed in passing the stricture, there can hardly be any difficulty in sliding upon it the smallest cylinder, after which the style may be immediately withdrawn and the urine allowed to escape. It will at once occur to you that many strictures occasion a tortuosity of the urethra, and that a firm metallic bougie cannot be made to follow these unnatural windings. To obviate this difficulty, I have suggested to Messrs. Tiemann & Co. to provide with each instrument some long, flexible bougies, small enough to enter the bore of this.

Some may ask, if we must resort to a flexible instrument, why not do so without the intervention of the metallic? I answer, because the metallic acts as a *sure* guide down to the very seat of the difficulty, and keeps all folds of mucous membrane from obstructing and turning back the point of the flexible. There is but one more division of my subject which I propose to mention, and you will excuse me for introducing it with words of warning.

Cases of stricture do occur in which all simple means of relief fail,

though I believe the patience of a patient man should be exhausted before the more heroic measures are adopted. If, then, after faithful and ineffectual trial of all means, both local and general, the surgeon deem it advisable to divide the stricture, I have made provision for that necessity in this instrument. A second style is furnished, in size and length corresponding to that already described, and differing from it only in having a cutting extremity. This is to be introduced through the handle, while the main instrument is held as a guide to the strictured part. God forbid that I should recommend any measure so fraught with danger as this, without throwing around it all possible safeguards. Let it, then, be distinctly understood, that this is to be held in reserve for extreme cases, and always as a *dernier ressort*, and that the part to be divided is to be first fairly reached by advancing the cylinders from larger to smaller, as already described; and lastly, that the operator decide in advance how far his incision shall extend, and guage his instrument accordingly, by means of the revolving nut arranged for that purpose upon the handle.

Having been informed that Drs. Alexander B. Mott and George T. Elliot, Jr., were using this instrument for the cervix uteri, thereby giving it a wider range of usefulness than I had anticipated for it, I addressed a note to each, asking the result of his experience. From Dr. Mott I have not yet received an answer. Dr. Elliot writes as follows: "It affords me great pleasure to say that I have found it useful as a dilator of the uterine cervix. In one case of dysmenorrhœa its effects were very happy indeed."

This instrument is manufactured and sold by George Tiemann & Co., 63 Chatham Street, New York, who will furnish a shorter variety expressly for the cervix uteri.

Dr. JOHN G. JOHNSON stated that this modification of Dr. Burge's apparatus would prove extremely valuable, not only in the way Dr. Burge had mentioned, but also in another way.

Dr. JOHNSON stated that he was called to a case a few nights since, where a man was suffering from retention of the urine. There had been an old stricture of the urethra, and this was complicated by false passages running in every direction. The patient had been for some time a patient of Guy's Hospital, and a No. 2 was the largest instrument that could be introduced whilst the patient was in the hospital. With the irritation that existed it was impossible to find the urethra. After the patience of three patient and persevering physicians had been exhausted, it was concluded to puncture the bladder. Examination per rectum showed the prostate much enlarged, and no trocar

was long enough to reach above it. Accordingly, the operation was performed above the pubes. The patient recovered without any drawback. Had Dr. Burge's improvement then been known, it would have furnished an admirable *trocar* and catheter for the puncture of the bladder per rectum.

Dr. JOHNSON would recommend the improvement as admirably serving where *per rectum* puncture of the bladder is necessary in cases of retention of the urine.

QUARTERLY REPORTS ON MEDICAL PROGRESS.

REPORT ON SURGERY.

By J. J. HULL, M.D.

1. *Free Openings into Suppurating Joints.* By Prof. E. S. COOPER. (San Francisco Medical Press, January, 1862.)
2. *A Case of Amputation of the Leg successfully treated without Ligating the Arteries.* Reported by Dr. H. RISTINE. (Chicago Medical Journal, March, 1862.)
3. *A Case in which Artificial Teeth were Lodged between the Tongue and Epiglottis.* Reported by JAMES PAGET. (London Medical Times and Gazette, January 18, 1862.)
4. *On the Return of Pulsations in Aneurisms after the Ligature.* (Gazette des Hôpitaux, from Medico-Chirurgical Review, January, 1862.)
5. *Polypus of the Rectum.* (London Medical Times and Gazette, February 8, 1862.)
6. *Hospital Phagadena Cured by the Submersion Treatment.* Reported by W. HUTCHINSON. (Ibid., January 4th, 1862.)
7. *On the Radical Cure of Varicocele by Subcutaneous Ligature of the Spermatic Veins.* By JOLLIFFE TUFFNELL. (Dublin Quarterly Journal.)
8. *A New Operation in Hernia.* By Dr. PANCOAST, Pennsylvania Hospital. (Philadelphia Medical and Surgical Reporter, March 29, 1862.)
9. *A New Splint for Fractures of the Wrist and Hand.* By Dr. J. E. GARRETSON. (Ibid., April 19th, 1862.)
10. *Congenital Inversion of the Bladder.* By JOHN LOWE, M.D. (London Lancet, American Edition, May, 1862.)

1. Dr. Cooper has of late written much on the importance of free openings into suppurating joints. In the January number of his journal he says: "We do not claim to be the first who opened joints in a state of suppuration. There are several cases reported in standard medical works upon surgery, but we know of no standard work in

which the practice is recommended as a rule. The cases mentioned were generally regarded by the writers as exceptional cases. Whereas, we believe that in *all* cases where purulent matter is found to any considerable extent in a joint, it should be discharged by a free incision, if such an operation would be proper in the patient who has burrowing of matter in any other part of the body, and that the operation is more imperatively demanded in the former than in the latter case; and further, that the more complicated the joint, (such as the knee,) the more the operation is demanded early. The time will come when the profession will confidently expect a cure in such case, with a complete restoration of mobility. The reason why it does not generally occur now is, a faulty system of treatment is in vogue. If, instead of permitting purulent matter to remain pent up in the joint cavity, producing absorption of the tissues and general disorganization, the surgeon would treat the abscess (for it is nothing else) upon rational principles, the results of these cases would be altogether different. The parts should be fully laid open, and every drop of purulent matter evacuated, as is done in other purulent accumulations. Not only this, but the wound should be kept open for the discharge of all that forms subsequently. We are constantly practicing this, and scarcely ever fail in securing a speedy recovery. Probably medical journalists have been led into the opinion that we urged an exclusive claim to this practice, in consequence of our articles upon the subject being generally accompanied with remarks in regard to the innocuousness of atmosphere admitted into the joints. Upon this subject we do claim priority. So far as we know, there is not another writer, either as a standard author or contributor to a medical journal, who claims to have any convincing proofs that atmosphere admitted into joints or other tissues is not generally a source of danger; on the other hand, they all urge, when dwelling upon the subject, that it is a most unfortunate, if not even dangerous, occurrence. So far as the interests of the profession are concerned, the subject of priority is a small matter in comparison with the importance of the practice in question, and we consider it the duty of all practitioners to report the results of their cases, because the profession have not universally, or even generally, adopted it as yet. We hold that a practitioner owes no greater obligation to the medical world than that of reporting his more important cases. And upon this subject we would solicit communications and the reports of cases from practitioners."

2. In this communication is related the case of a little girl, (age not given,) who, while playing in a meadow, was accidentally run

over by a mowing machine, the scythe of which entirely severed her leg about an inch above the ankle-joint. Dr. R. was at once sent for, and on arriving, three or four hours after, found her quietly sleeping, without a particle of hæmorrhage, and with a good strong circulation. He was told she had bled freely immediately after the injury, but it ceased on her being brought to the house, a few hundred yards distant. Amputation being necessary, an assistant was sent for, and on his arrival, seven or eight hours after the accident, she was placed under the influence of chloroform, and the circular operation was performed. There not being a sufficient amount of hæmorrhage to enable the operator to find the vessels, pressure was removed from the femoral artery, which had been compressed during the operation, but the arteries still refused to bleed a single drop. After removing everything that could possibly interfere with the circulation in the limb, the result remained the same. The temperature of the limb up to the time of the operation was natural. She was allowed to recover from the chloroform, and the stump was exposed to the influence of the air for an hour, there being no bleeding. Warm applications were resorted to, and continued perseveringly for at least four hours, during which time *not five drops of blood* oozed from the stump. All remedies having been exhausted to bring about a flow of blood, at least sufficient to enable the arteries to be found, without success, patient was again placed under the influence of chloroform, and the stump dressed in the usual manner, the arteries being left to care for themselves, taking the risk of their bleeding. On the fourth day the stump was dressed, up to which time there had been no discharge of any kind sufficient to discolor the dressing in the least. The stump healed kindly, with very little constitutional disturbance, discharging about the usual amount of pus during the healing process. The writer thinks the absence of hæmorrhage was entirely due to the retraction of the vessels, and not, as some suggested, to the formation of coagula, which he says must have been to the extent of nearly four inches, to have prevented a renewal of bleeding after the operation.

3. The following case seems worthy to be added to the records of foreign bodies found in places where they were least likely to be, and producing symptoms very similar to those of organic disease:

"In July a gentleman, sixty years old, after being engaged all day in more than usually fatiguing business, and exposed to cold air, felt faint and ill in the evening, and went to his bedroom at the hotel in which he was staying. While lying down, faint, or, perhaps, in the beginning of a slight epileptic seizure, he asked the servant to take

out for him his artificial teeth—nearly complete separate sets for the upper and lower jaws. The servant, he believed, took them out. Of what immediately followed he could remember nothing, more than that he became much more ill, with difficulty of breathing, and a sense of choking and suffocation, in which, in great anxiety and alarm, he sent for medical help. He was found suffering with much difficulty of swallowing, and some dyspnœa.

"His tonsils appeared much enlarged, and unusually red. These symptoms were treated, and in some measure relieved; and when one set of his teeth were missed on the day after the beginning of his illness, his medical attendants, who suspected that they might have been swallowed, were begged not to speak of them to him, for fear of the excitement and alarm that such a suspicion might excite in him. All the severity of his symptoms being subdued, in a few days the patient returned to his house at Rhyl, where Mr. Theed, as usual, attended him. For the first few days Mr. Theed saw appearances of slight inflammation of the fauces, but these soon subsided; from that time nothing morbid could be seen in his throat. He had considerable and increasing difficulty of swallowing; was obliged to drink very slowly, and to cut all his solid food into very small fragments, and force them down his throat with gulping. Occasionally he was almost choked by food becoming involved in a tenacious mucus, which appeared to be secreted in large quantity at and beyond the fauces. Occasionally, also, he vomited after taking food. He had frequent short, "hacking" cough; and once or twice hawked up a little blood. He suffered no considerable pain, but felt constriction about his cricoid cartilage, and always referred to that part as the seat of obstruction hindering his swallowing. His voice was rough, and rather hissing; his breathing sometimes wheezing.

"Many times, while watching these symptoms, Mr. Theed suspected that they were due to some foreign body in or near the larynx; but he could see none; and the patient, as often as inquiries were directed to this point, declared somewhat impatiently that the thing could not be. Especially when with the tardily given permission of his relatives he was asked if the false teeth, which he had lost on the night of his illness, might not have slipped into his throat, he maintained that it was quite impossible; for what he had lost was a whole upper set, which, he believed, had been unluckily thrown away with the water into which they were put at night. The piece was far too big, he said, to go into his throat, or to be there without his knowing it. However, as none of his symptoms diminished, and he was

becoming very thin and feeble, Mr. Theed in November brought him to London for consultation. His feeble appearance, his dull, pale face, his emaciation, and the recital of his case, made me fully expect that he had cancerous stricture of the upper part of his œsophagus. On examining his mouth and fauces, I could see nothing unnatural, till, on extremely depressing the back of the tongue, I saw something white near his epiglottis, but too obscurely to guess what it was. Passing my finger to the side of the epiglottis, I felt teeth there, and soon hooked out the whole lost set, with their gold palate-plate and other fittings.

"The piece lay between the base of the tongue and the epiglottis, very closely fitted to all the surface on which it rested. The teeth were directed upward, and I believe the incisor teeth were next to the epiglottis, and the notch in the palate-plate next to the root of the tongue.

"The most remarkable point of this case, next to the fact of the patient being unconscious for more than three months of what he had in his fauces, is, that a thing so large could be out of sight at the root of the tongue. It may be well, therefore, to repeat that it was completely invisible, except when the base of the tongue was exceedingly depressed, and even then only a small part of it was obscurely seen. To this, and to the patient's dread of any other examination than that with the eye, it must be ascribed that the lost teeth were not discovered long before I saw him.

"It may be worth notice that the patient referred to the parts about the cricoid cartilage as the place of obstruction in swallowing. This may be an instance of transference of morbid sensation, similar to that by which the irritation that excites coughing, wherever its true seat may be, is felt as if it were at the top of the larynx. A similar deceptive transference of sensation was observed in a lady whom I saw with what I supposed to be cancerous stricture of the upper boundary of the œsophagus. She always pointed to the cricoid cartilage as the place of obstruction; but her disease proved to be a cancerous ulcer of the tongue, immediately in front of the epiglottis, and her pharynx and œsophagus were healthy.

"Since the removal of the displaced teeth the patient has regained health, and Mr. Theed's last report of him is, 'I think him as well as before the accident.'

"P. S.—Since this narrative was in print, Mr. Theed has written that the patient has had 'a very severe attack of epilepsy, which lasted for five or six hours, during which time the convulsions were

so violent that if I had not removed (though with great difficulty) his full set of teeth, he would have inevitably broken them into pieces.' This, I think, elucidates the previous mystery."

4. "During a discussion on aneurism at the Society of Surgery, M. Broca observed, that the return of pulsation may depend upon three different causes: the persistence of the pulsations, return of the pulsations, and relapse of the aneurism. In the first of these cases, it is due to the presence of a somewhat large collateral vessel very near the aneurismal sac. The pulsation soon appears, but the cure of the disease is not prevented. In the second case, when the pulsations return, the sac is suddenly filled with coagula, which have not had time to become organized, and these 'passive' coagula are gradually dissolved, the arterial pulsations then reappearing. They appear soon after the operation, and may persist for one, two, three months, or more. At last, these first coagula are replaced by 'active' coaglua, and a cure is produced in almost all cases. When relapse is to happen, the pulsations do not reappear so soon as in the preceding case; not occurring until one, two, or six months, or even from one to three years, after the ligature. At one of these remote periods, the blood has made a passage into the sac, and having hollowed out a more or less spacious cavity, the tumor takes on again the characters of an aneurism. Under all the above circumstances, more or less circumscribed pulsations are perceived in an aneurism for which an operation has been performed, but the prognosis is very different. In the first two cases no surgical treatment is called for, while that of relapse is a very serious one.

"M. Broca gave an account of the various cases he had collected exemplifying these occurrences. These do not comprise mere persistence of the pulsations after the application of the ligature, as, owing to the circulation being rendered slower, the deposition of fibrin goes on gradually and regularly until a cure is accomplished. They relate only to the cases in which the aneurismal tumor, after having been filled with coagula, at the end of a certain time again becomes permeable; and these, as stated above, may consist of instances of *return of pulsation* and *relapse, properly so called*. Cases of return of the pulsation are distinguished from those of relapse, by the fact that the tumor makes no progress; its pulsations, always more feeble than before the ligature, acquiring their maximum of intensity in a few hours, and then diminishing in force. Of 26 cases collected from various sources by M. Broca, 13 were aneurisms treated by ligature of the femoral, 4 of the external iliac, 6 of the primary carotid, 1 of the

subclavian, and 2 of the radial. In 5 of the cases, the pulsations reappeared before the end of the first day, eight times from the third to the seventh day, four times from the eighth to the fifteenth day, once on the nineteenth day, and once at the end of the seventh week; in this case only continuing during one day. None of these patients became the subjects of gangrene. One died from phlebitis, the ligature having perforated the femoral vein; and another in consequence of secondary hæmorrhage from the wound made for the ligature. All the other 24 cases survived, and all were radically cured, with the exception of two, which went on to true relapse. Of *relapse*, properly so called, he has collected 22 examples; this manifesting itself in 7 towards the end of the first month, and in 13 after the end of the sixth month; the epoch not being exactly indicated in the two others. It is remarkable that in none of the cases completely known has the relapse occurred between the first and the sixth month. All the relapses occurring after the end of the sixth month related to aneurisms of the lower extremity. Six relapses occurred between six months and a year, 2 at the end of a year, 1 at the end of two years, 1 at the end of four years, 1 at the end of seven years, and 1 at the end of fifteen years. This class of cases is far more serious than the former; for although in three instances the aneurisms were cured spontaneously, or by means of slight treatment, and in two others they remained stationary for a long time, in all the rest their progress was much more alarming."

5. "Although surgical writers have always regarded this disease as a rare one, modern surgeons are now beginning to discover that such is not the case, and that examples are not infrequent among the out-patients of a Metropolitan Hospital. Mr. Bryant informs us, as the result of his experience, that the disease is by far the most common in children, and in those under two years of age; and the chief symptom by which the presence of the growth may be recognized is bleeding from the bowel. In adults, this surgeon affirms that the affection is comparatively of rare occurrence, the experience of Guy's Hospital certainly well supporting this assertion. We give the following case as one amongst the most recent which have taken place in Mr. Bryant's practice: Francis D., a boy, aged 10 years, was brought by his mother to Mr. Bryant on January 10th, for hæmorrhage from the bowels. The bleeding had appeared at times for one year, but for the last three months it had been very constant and profuse: it came on, however, only when at stool. Upon making an examination with the finger, a polypus, the size of a large nut, was

detached and hooked down; a ligature was applied to its pedicle, and on the third day the growth came off. No bleeding followed, and convalescence was speedily established."

6. In October last, I had occasion to excise the elbow-joint, on account of destructive inflammation, which had followed an injury, with laceration, near the olecranon. The patient was a man of nearly thirty years of age, and of feeble constitution. After the operation, everything went on extremely well for a fortnight, when the wound was nearly healed. Acute hospital phagedæna, which was at the time prevalent in our wards, now attacked the two or three small sinuses which remained, and rapidly spread. In spite of the free use of strong nitric acid, and of the permanganate of potash lotion, with suitable constitutional treatment, the phagedæna advanced, till it had destroyed a large part of the integument at the back of the joint, and it seemed very questionable whether we should save the arm. Fuming nitric acid had been three times applied, and the ulnar nerve had been destroyed. I now determined to try the submersion plan, one not unfrequently adopted in some of the German hospitals. The entire arm was placed in a large tin bath, being rested upon a pillow, which was laid in the water. The water was kept comfortably warm, and frequently changed. The man being propped up in the half-reclining position, did not find the position irksome. The advantage was most immediate and most marked. In three days the sore was clean, and in six it was covered with florid granulations, and healing rapidly. The constitutional treatment had throughout been the same, and there could be no doubt that the improvement was really due to the use of the bath. The latter was continued for about ten days, when, as healing was everywhere rapidly progressing, it was laid aside. No relapse of phagedæna occurred, and a very useful arm has been obtained, though, of course, with a large scar at the back of the new joint.

In any similar case, I should certainly incline to adopt this plan much earlier. The comfort afforded to the patient while the part is submerged is very great, and by completely washing away every particle of pus as soon as formed, it prevents the spread of the unhealthy action by contagion from the morbid secretion of the sore. Its principle of action is therefore the same as that of the irrigation method largely employed at Guy's Hospital in similar cases.

7. "The plan I advocate is simply an improvement upon Mons. Ricord's double ligature, by adding to the double loops for the inclosure of the veins a pair of *retracting guides*, by which the surgeon is

enabled to withdraw the compressing medium at any moment, thus holding, as it were, a check-string upon inflammation in his hand, producing an adhesive phlebitis, and stopping short of the suppurative form. With this latter view, I employ also fine iron wire as a substitute for the ligature of silk, metal being less irritating to the parts engaged. Before resorting to the plan which I am now about to advance, I had found that in each instance in which I had used Ricord's loops, suppuration in the scrotum occurred. Since employing the retracting guides, no such annoyance has taken place. The method, then, that I advocate, is the following: In any given case of varicocele that comes before me, I interrogate the individual, and ascertain whether any remedial means have as yet been adopted; and if not, I recommend palliative treatment, viz., attention to the bowels, so as to prevent by regularity of action any lodgment in the descending colon; the use of cold water sponging night and morning, to constringe the vessels and dartos of the scrotum, and a bag truss. I do not advocate the use of pressure to the dilated veins at the external abdominal ring by means of the spring truss, or the puckering in of the loose skin of the scrotum, and the confining it in a steel ring, as sometimes adopted—my experience being to the effect that these remedies only irritate the patient, and that they are both inferior in action to a well-fitting, common bag truss. If these simple measures fail, I employ the following proceeding, after satisfying myself of the non-existence of organic disease of the kidney:

"I prescribe an aperient of the compound powder of jalap combined with calomel. I confine the individual to bed for a day, and then deligate the veins in the manner recommended by Ricord. An assistant separates and holds aside the vas deferens. The bundle of veins is then isolated, and taken up in a fold of the skin, the first loop of wire being carried behind the veins. A second loop of wire is then passed in the opposite direction, in front of the veins, through the same orifices as the first. The bundle of veins is thus included between the two loops, the free extremity of each wire being passed through the loop of the other. The wires are then drawn in opposite directions, until about as much of each loop remains projecting from the scrotum, and the amount of the projection of the loop made equal on either side. Two portions of iron wire are now taken, each four inches in length, and doubled in the middle as closely as possible. One of these is passed through either loop, and drawn to its centre. The ends are then twisted. These wires form the *retracting guides*, and give the surgeon the most complete control over the vessels of the

cord, enabling him at any moment he wishes to take the ligature from off the veins, and remove all source of irritation from within the scrotum. The main wires are now to be drawn upon equally and *forcibly* until the vessels of the cord are completely strangulated. This done, the ends of the wires are brought up and attached to a ratchet, and thereby kept tensely strained, or else twisted around the extremities of a piece of strong watch-spring, bent back into an arc, the effort of which to restore itself keeps up continuous tension upon the cord. With reference to the length of time it may be necessary to maintain this constriction in order to produce sufficient adhesive phlebitis, and yet avoid the suppurative form, this must entirely depend upon the constitution of the individual. The guides to the surgeon will be the density of the swelling of the veins below the ligature, between the epidydimis and the wires; the feeling of firmness to the touch; and a slight blush upon the integuments of the scrotum.

"These symptoms will denote inflammation sufficient to produce obliteration of the venous trunks. The main wires are now to be cut across, and the ratchet or steel spring detached. This done, the figure of 8 loop encircling the veins is to be opened, by withdrawing the wires through the medium of the retracting guides. A little lead-wash to the scrotum, and rest upon the back in bed for a few days, completes the cure. The patient, before rising, should be fitted with a suspensory bandage to support the parts."

8. "This was the case of a man far advanced in life, who had just entered the hospital to place himself under surgical treatment for an incarcerated scrotal hernia. Efforts had been made by the usual appliances of warm bath, etherization, etc., to reduce it, but without avail. There were none of the extreme symptoms usually present in strangulated hernia, and the diagnosis was therefore made of incarcerated hernia with stricture at the external abdominal ring. An operation was decided upon, and the lecturer took occasion in his clinical remarks to speak of an entirely new operation, of which he believed he was the originator and the only surgeon who had performed it. It was the division of the stricture by subcutaneous incision, on essentially the same principle as that for division of the tendo-Achillis or the soleus muscle for the cure of talipes. He had performed this operation in several instances with the most satisfactory results, curing the patient in much less time than is required by the usual operation, in some cases requiring the patient to lay by only a day. But it is only applicable in those cases where the stricture is at the external ring, and this should always be borne in mind. The operation was

performed as follows: A grooved instrument was first introduced some distance below the stricture, passed under the skin and fascia, and into the external ring, so as to raise it upon its point; the director being kept entirely outside the sac. A common bistoury (though that instrument is too much bent at the point to be an appropriate one) was then *held firmly* with its back upon the grooved director through the integuments, just below the stricture. By rocking the handle of the bistoury backward, the point slid along the groove to the seat of the stricture, dividing it. Great care is necessary to avoid wounding the bowel, which lies very close to the knife, while if properly performed it is less dangerous than the ordinary operation. The hernia was then readily reduced, and a bandage and compress applied to prevent its return."

9. "The splint is simple in construction, costless, and readily made. It may be prepared for each special case, or the surgeon may be always provided with an assortment of varying sizes, from that suitable to a child to that for a laboring man. Splints should be made in pairs, for right and left hands. To prepare the splint, the hand and arm are laid upon a strip of thin board, on which a rude outline of the part is drawn. The splint is then shaped to this outline. On the portion of the splint representing the wrist and hand is poured a mixture of plaster of Paris at a proper consistence for receiving an impression. The fracture being adjusted, and the hand and wrist in a proper position, they are pressed into the plastic mass. Before the cast hardens it is shaped according to the indications of the case as the surgeon desires. If an assortment of splints is made, they will be shaped for the full support of parts, inclosing simply the hand, or the wrist and forearm. An advantage of keeping an assortment is having splints ready for the treatment of swollen or lacerated hands or wrists, where a closely fitting cast would not be suitable. A light roller bandage is simply applied to retain the splint in position, and the whole is supported in a sling." This splint is recommended for fractures of the metacarpal or phalangeal bones, and of the lower extremity of the radius, but a serious objection to its use in any case, as it seems to us, is the rigidity of the several joints that must be produced. An extensive hospital practice in the treatment of fractures of the lower end of the radius has led us to prefer the ordinary anterior and posterior splints, extending from the condyles of the humerus to the wrist, leaving the hand free, to all other methods as a surety against this unpleasant result.

10. "This affection is so rare that it is passed over in silence by

most authors of systematic works on surgery. The only recorded case which I have met with is that given by Mr. Crosse in the *British and Foreign Medical Review*, (Oct., 1846,) which is exceedingly interesting as showing the importance of careful diagnosis before attempting any operative measures on tumors of the genital parts in female children. In this instance, the patient, aged three years, had a tumor to which a surgeon was about to apply a ligature, when Mr. Crosse, who happened to be present, fortunately discovered an aperture which he found to be the ureter. The operation was of course postponed *sine die*. By firm pressure the inverted bladder was made to repass into its natural position, and consequently, the child was saved from an untimely death. The report goes on to say that the prolapse of the bladder did not subsequently return, and the patient grew up to womanhood with no other inconvenience than a constant incontinence of urine. The following report of a very similar case may be recorded, more especially as operative interference was here pursued with excellent results:

"M. A. H., aged two years and a half, a fine, healthy, but very irritable girl, was admitted into the West Norfolk and Lynn Hospital on the 10th of November, 1859. On examination, a vascular-looking tumor, about the size of a large Italian walnut, was found projecting between the external labia. When the little patient cried the tumor became more injected, and increased considerably in size; at the same time a gush of urine took place. On closer inspection, the mass was found to be seated at the orifice of the urethra. On making a little gentle pressure, the tumor receded under the figner, and presently disappeared altogether within the urethra, and the forefinger could be readily passed within the bladder. I had, therefore, no difficulty in diagnosing an inversion of the bladder. From the statement of the mother, it appeared that the child had been subject to incontinence of urine from its birth, and that from the time it was two or three days old a small substance had been observed to protrude during a fit of crying or straining. Each effort of this kind was followed by a flow of urine, and the child's condition was truly pitiable. The thighs and labia were much excoriated, and the latter, as well as being swollen and indurated, were covered with numerous pustules. Until the age of two years the tumor had receded as soon as the fit of straining was over, but latterly it constantly protruded more or less.

"After considering the various means which might afford a chance of improving this distressing condition, I resolved upon making use of the actual cautery, which seemed to me best adapted for narrowing the

calibre of the urethra, and thus preventing the descent of the bladder. Accordingly, after putting the patient under the influence of chloroform, and having replaced the bladder within the pelvis, where it was retained by two stout probes, which served to keep the canal patent, a female sound, heated to a white heat, was applied to the track of the urethra. A small curved catheter with a bulbous extremity, which had been previously made by my direction, was then introduced and fastened in, and the patient put to bed. No constitutional symptoms followed, but there was considerable pain in passing urine.

"On the 17th a small slough separated. Patient can retain four ounces of urine when in the recumbent posture.

"December 1st.—The catheter, on being removed, was found coated with a thick deposit of phosphate of lime; urethral canal perceptibly smaller.

"After the expiration of a month, during which there was distillation pretty constantly, with occasional power of retaining several ounces of urine, the cautery was again applied as before. The same manifest improvement followed. The child became much more comfortable, and cleanly in person. The excoriations almost entirely disappeared, and the pustules healed. On three subsequent occasions, (making five in all,) the cautery was repeated after long intervals. The urethra became so much diminished as to admit only a No. 4 catheter; urine escaped only when the patient cried or strained.

"After having been a patient of the hospital about eleven months, during the latter part of which she was an out-patient, coming in at intervals to be operated on, she was discharged. I have since learned that she continues well, with not the slightest evidence of prolapse, but with some degree of incontinence of urine."

REPORT ON INFANTILE PATHOLOGY AND THERAPEUTICS.

By A. Jacobi, M.D., Prof. of Infantile Pathology and Therapeutics in the N. Y. Medical College.

(1.) *Mechanical Causes of Death.* Hecker and Buhl. (Obstetrical Clinic, 1861.)

(2.) *Congenital Atresia of the Ostium Arteriosum Dextrum.* By Carl Heine, M.D. (A Contribution to the Science of Congenital Anomalies of the Heart. With a Plate. Tuöingen: 1861. Pp. 71.)

(3.) *On Epidemic Roseola.* By Dr. De Man. (Archives of the Dutch Contributions to Natural and Medical Sciences, Vol. III.)

(4.) *Proper Time for Vaccination.* (Arch. Méd., March, 1862.)
(5.) *Medical Report on the Lying-in and Foundling Hospital at Vienna, of the Year* 1859. Pp. 265.

(1.) Of 100 dead new-born infants, the cause of death was a mechanical one in 27; in 11 of these, the cause was obstruction of the respiratory organs; 8 were still-born, and 3 did not survive the first day; one living 3, another 7, the third 21 hours. One died 12 hours before birth. Six were males, 5 females; the average weight was 5.6 pounds Par. The obstruction was due in 10 cases to a greenish or greenish-brown liquid, of the consistency of mucus, filling either the entire larynx and trachea down to the bifurcation, or also the smallest ramifications, or allowed of the entrance of a small quantity of air. Therefore in 6 the lungs were in their fœtal condition, in 5 they were found to contain some air; among these 5 are those 3 who died on the first day; thus leaving 2 dead before birth, whose lungs were inflated to a certain extent. One of these 2 had made instinctive inspiratory movements; in the other artificial respiration had been resorted to. The pulmonary tissue was of a brownish-yellow color, particularly in those containing air; incision and pressure yielded a liquid of the same color. The larger masses found in the trachea looked like the meconium contained in the colon; the pharynx was filled with the same mass; mouth and nostrils contained some; the whole body, and particularly the umbilical cord, were soiled by it. This condition of the surface shows the cause of death before even the post-mortem examination is made. The microscopical examination of the substance contained in the lungs yields yellow or yellowish-red coloring corpuscles of different sizes and irregular shapes; cholesterine frequently; fat-globules and pavement epithelia—*meconium.* At the same time there was very little meconium, or none at all, in the lower portion of the intestinal canal. In those that had made attempts at breathing, meconium was also found in the pulmonary tissue, and the pleuræ exhibited a number of small extravasations; these were not absent even in such cases in which the lungs had remained in their fœtal condition. Pleural cavities were filled with a yellowish-red serum in two cases.

The manner in which meconium entered the lungs cannot be doubtful, after the investigations, (by Hecker, Schwartz, etc.,) on premature respiratory movements. The cause is found in *aspiration,* that is, instinctive inspiration, while still in the uterus. In one case only neither aspiration before or during birth, nor meconium, were the cause of death. A boy with double hare-lip and complete cleft pal-

ate, vomer pointing to the right, was killed by being given a little milk seven hours after birth, during crying. Larynx, trachea, bronchi, and air-cells contained milk. (In the same child there were found besides, patency of the septum of the ventricles, of 8 millim.; deficient development of the tricuspidal valve, and of the external sexual organs; conglutination of the second and third toes, each side; remainders of an inflammatory process in the right heart; whitish thickening of the endocardium; conglutination of the internal and anterior semilunar valves of the pulmonary artery, and thickening of its nodules and free margin.)

The cranium was usually hyperæmic; cephalhæmatoma twice on the right parietal bone, once on both; extravasation once in the left arachnoidal space; once in the pia mater, around the central lobe of the right large hemisphere. Extravasations, like those in the pleuræ, in pericardium, origin of aorta, ductus arter. Botalli, connective tissue of mediastinum, thymus, and cortical substance of kidneys. Ventricles of heart, particularly the right one, and coronary vessels, usually very much injected. Some bloody serum in the abdominal cavity, in two cases.

Other foreign substances were found in the lungs. In two cases there were the fungi of muguet, (oïdium albicans, etc.,) transmitted from their usual seat in the mouth; they did not produce pulmonary incompetency, but the infants died of puerperal infection.

(2.) The classification Dr. Heine submits to his readers is somewhat similar to those laid down by Bischoff and Förster for the congenital diseases of the heart. It recommends itself by both its simplicity and completeness.

I. Deviations as to Quantity.

A. The normal size and number are not reached.

a. Defects proper.

1. Acardia, entire absence of heart. In Acephali only; the arteries for trunk and extremities originate by direct division of the umbilical vein.
2. Absence of pericardium. Particularly in ectopia.
3. Absence of large blood-vessels.

α. Absence of one of the vv. cavæ. Only a single large vein leads to the heart.

β. Absence of pulmonary artery. Ductus Botalli remains open and active.

γ. Absence of ascending aorta. Pulmonary artery and ductus Botalli act instead.

δ. Absence of ductus arteriosus Botalli.

b. Incomplete formation of heart in its single parts. Mostly in consequence of interrupted development.

1. Heart consists of but one longitudinal cavity, (or a solid mass, in Zagorsky's case.) Only one v. cava from behind. Only one large artery. Analogous to the heart of Crustacea.
2. Heart consists of one ventricle and one atrium. The first with one artery, the second with one vein. Analogous to the hearts of fish and batrachia.
3. Heart consists of two separate atria and one ventricle. Aorta and pulmonary artery separate in some only. Vv. cavæ and pulmonales separate. Septum between the atria more or less complete. Analogous to the heart of fully developed batrachia.
4. Incomplete development of pericardium. Lower portion is absent; apex of heart between the lobes of the liver.

c. Abnormal smallness.

1. Of the whole heart.
2. Of a single cavity.
3. Abnormal smallness and narrowness of blood-vessels and their ostia, with absence or smallness of valves.

d. Atresiæ.

1. Of the right,
2. Of the left venous ostium.
3. Of the right ostium arteriosum.
4. Of the left ostium arteriosum.

} By adhesion, or conglutination of valves, or by pathological processes.

5. Obliteration of the trunk of pulmonary artery.
6. Obliteration of the trunk of aorta.

e. Fissures.

1. In the septum of the atria, either remained open or by perforation.
2. Remaining patency of for. ovale.

B. The normal size and number are exceeded.

a. Excessive number.

1. Duplicity of heart, in one body.
2. Duplicity of one of the atria.
3. Duplicity of one of the ventricles, usually the right. By separation of the conus arteriosus depending on fœtal disease. Described by the English as "supernumerary septum in the right ventricle."

4. Duplicity of one of the large blood-vessels.
5. Supernumerary valves of the ostia.

b. Excessive size.

1. Of the heart.
2. Of one of its cavities.
3. Of pericardium.
4. Of large blood-vessels.

II. Deviations as to Quality.

a. Anomalies of the shape of the heart—(spherical, flat, long and pointed, broad and obtuse, deep indentation of apex, etc.)

b. Anomalies of position.

1. Inside the thorax.
   - *α.* Too far to the left.
   - *β.* To the right.
   - *γ.* Transverse position.
   - *δ.* Perpendicular position.
   - *ε.* Too high.
   - *ς.* Too low.
2. Outside the thorax.
   - *α.* In front of the left thorax—(ectopia proper.)
   - *β.* In the abdominal cavity.
   - *γ.* In the cervical region.

c. Anomalies of the origin of the large blood-vessels.

1. Only one large blood-vessel from the two ventricles communicating by the septum remaining open.
2. Pulmonary artery from the left ventricle, together with aorta.
3. Aorta from the right ventricle, together with pulmonary artery.
4. Transposition of the two great arteries.
5. Patency of ductus arteriosus Botalli, (which originally is the right aorta.)
6. Abnormal origin and ramification of the large veins, (rare.)

(3.) Dr. J. C. De Man, of Middleburg, Holland, believes that he has brought to a close the old question whether there is a distinct eruptive disease deserving the name of roseola, (or rubeola.) The results of his elaborate essay on this subject are the following:

1. Epidemic roseola or rubeola appears to be an independent disease, taking its own course like other epidemics. It must not be mistaken for measles or scarlatina.

2. It has been thought to be identical with them. Therefore, its

history is not very well known, and no confidence is to be placed in the assertions of such as deny its occurrence in some countries.

3. It is met with in every season, sparing no age. Children and young women are the principal sufferers.

4. Prodromi are absent in many cases; if not, they are very much like those of other eruptive fevers.

5. For this reason the exanthem is often found very unexpectedly, and has even left part of the surface before the patient is aware of being affected. It is accompanied with much itching.

6. Unless the disease is complicated, fever and other morbid symptoms, if at all present, disappear with the eruption of the exanthem.

7. Most cases are not complicated; sometimes a tracheal cough not similar to cough attending measles; sometimes pharyngeal angina of so little severity that in many cases it is not even followed by a removal of the epithelium.

8. Generally there is no vascular reaction; in some cases it was erethitic, in some inflammatory. Unless the fever is very intense, beneficial perspiration will set in during eruption under the influence of a warm temperature. Urine is almost always normal.

9. The form of the exanthem is that of roseola, and therefore consists of isolated, irregular spots. When it is complicated with tracheal cough it is easily mistaken for measles; when it is confluent, and the mucous membrane of the pharynx is affected at the same time, it looks more like scarlatina.

10. Size, color and extent of the spots depend upon the manner of eruption, vascular reaction, and constitution. The difference is most distinct in anæmic and plethoric persons.

11. The exanthem takes a course of one, two, or three days; remnants, either pale or bluish, are visible for some days longer, and may give rise at a later period to a new eruption.

12. Desquamation rarely takes place; when it is observed, it is less general than in measles, and consists of much smaller scales; desquamation like that attending scarlatina has not been noticed.

13. After the exanthem has disappeared, there is a tendency—but less than after scarlatina—to rheumatism and neuralgic affections.

14. As a rule, there are no consecutive diseases; sometimes, however, glandular swelling and predisposition of dyscrasic nature.

15. The prognosis, therefore, is more favorable than in measles; much more so than in scarlatina. Nevertheless, it is necessary to prevent the development of morbid sanguification and absorption.

16. Neither measles nor scarlatina procure any immunity from roseola, or *vice versâ*.

17. The causes are unknown, and also the manner of its spreading. Many observations appear to favor its contagiousness; but others prove the contrary.

18. Scarlatina, measles, variola, hooping-cough, will frequently affect all the members of a family after the first case; not so roseola.

19. The nature of an epidemic of roseola intimates the question, whether or not this disease has its regular migration over the globe, and whether or not it is but the feeble and last trace of a disease that was attended with more intense symptoms in former periods. The same case is assumed in syphilis and miliaria.

20. Roseola is met with during epidemics of hooping-cough, measles, or scarlatina. In Middelburg, measles and scarlatina had just disappeared when epidemic roseola was observed. At this time, no other case of either measles or scarlatina was observed.

(4.) The Permanent Commission on Vaccine, of the Academy of Medicine of Paris, has arrived, in their yearly report on vaccination, as practiced in 1860, read by Dr. Depaul, at the following conclusions:

1. Vaccination practiced in the first few days after birth does not give rise to either more numerous or more dangerous consequences, than the same operation performed at two or three months.

2. It may be admitted that in general practice, under conditions in which the danger of infection is decidedly small, vaccination may be delayed; but such a delay must be avoided in children born, or sojourning for a time, in hospitals.

(5.) During the year 1859 9,797 infants were received in the Foundling Hospital. Their age was: over a year, in 104; over a month, in 674; under eight days, in 1,255. The other 6,764 had an average age of nine days. Of that number, 3,095 were put down as feeble on the day of their reception.

The reports are as valuable as usual; some prepared with the utmost care and conscientiousness; some less so. Amongst these, we are inclined to count the case of *purulent meningitis*. The child of a wet-nurse, $3\frac{1}{2}$ months old, was brought to the hospital emaciated and anæmic. On the first day symptoms of cerebral hyperæmia, and violent fever with increased temperature, especially about the head. On the second day, the fever persisting, chronic convulsions of the upper extremities and bulbi. On the third day again convulsions, less fever, temperature less increased. On the fourth sopor and excessive anæ-

mia; death. Post-mortem examination: The surface of the large hemispheres covered with purulent exudation; ventricles not dilated; in both of the lungs spumous serum; in the pericardium a small amount of reddish fluid; on the pleura a little tough fibrinous exudation. No mention is made of a close microscopical examination of what is reported to have been purulent exudation. Thick fibrinous exudation on the same parts has quite the appearance of pus, as we have noticed in several instances; and this fact, together with the course of the disease, render a mistake in this case more than probable.

Cerebral Apoplexy.—Three cases, infants 2, 3, and 1 days old, the last of a syphilitic mother. One case was uncomplicated inter-meningeal apoplexy, at the base of the middle lobes of the large hemispheres, in the left lateral ventricle, and around the cerebellum. Liquid contained in the pericardium, of bloody color. Second case: Meningeal and cerebral apoplexy. Copious extravasation in the left arachnoid sac, and left large hemisphere, with extensive destruction of cerebral substance. Third case: Meningeal and cerebral apoplexy. The subcutaneous tissue of the occiput exhibits bloody suffusion; extravasation between the membranes, over both large hemispheres, posteriorly; left lateral ventricle moderately extended with liquid blood; apoplectic infarctus of the size of a bean in the posterior portion of the right large hemisphere; brain generally hyperæmic; lower lobes of both lungs atelectatic; of the left completely, of the right but partially so.

Trismus and Tetanus.—Nine cases. Principal medicaments resorted to, atropia, morphia, quinia. Death

after 7 hours in 1 case.
" 8 " 1 "
" 24 " 2 cases.
" 2 days in 2 "
" 3 " 2 "
" 4 " 1 case.

Post-mortem examinations were made in all of the cases. Nothing was found to explain the symptoms. Cerebral hyperæmia, which in itself cannot produce tonic muscular contraction, was found in every case, but justly considered as consequence, not as cause, of the convulsions. No mention, however, is made of the microscopical examination of the spine, which would have been worth the trouble, since the beautiful investigations of Prof. Demme, who always, in cases of tetanus, found increased connective tissue in the spinal substance.

Ophthalmia Neonatorum.—608 infants. The affection commenced

On the	1st	day of life in	7 cases.
"	2d	"	5 "
"	3d	"	12 "
"	4th	"	8 "
"	5th	"	14 "
"	6th	"	9 "
"	7th	"	11 "
"	8th	"	159 "
"	9th	"	212 "
"	10th	"	37 "
Between	11th and 20th	day in	78 "
"	21st and 30th	"	9 "
Later,			7 "
Both eyes were affected in			409 "
Right eye alone		"	19 "
Left "		"	24 "
First right, afterwards left eye, in			46 "
" left,		" right "	70 "

A large number of patients (193) died, while they were suffering from ophthalmia, of other diseases, partially brought into, partially contracted in, the hospital. The causes of death in these cases were bronchitis and bronchial catarrh, 5; convulsions, 1; congenital debility, 35; diarrhœa, 55; gangrene of external ear, 1; gangrene of cellular tissue, 1; gangrene of umbilicus, 1; hæmorrhage from intestines, 1; pseudo-erysipelas, 1; pneumonia, 6; pyæmia, 1; tabes, 85. Some of the patients entered the hospital with destruction of the cornea, some with obnubilation. During their residence in the hospital no destruction took place, but seven cases of darkening of the cornea; four of which were already entirely relieved while in the institution. Treatment with solution of nitrate of silver, or mitigated nitrate of silver, after the rules laid down by Prof. Arlt. In a few severe cases, embrocations at the same time, of ungt. hydrarg. and extr. hyoscyam., and application of ice. Applications of water were made in many cases.

Bronchial Catarrh and Hypertrophy of Thymus Gland.—The following case is of particular interest: Infant of 33 days, with moderate bronchial catarrh. On the second day fluid evacuations; contain blood in the evening. On the seventh day, bloody evacuations continuing; sugillations around the navel. On the eighth day, hæmorrhage from the umbilicus; blood thin and serous; hæmorrhage re-

lieved but for a short time; pneumonia of left lung; anæmia. Death on the ninth day. Post-mortem examination: Dispersed small extravasations between dura mater and cranium; brain anæmic, serous; serum in the lateral ventricles. Trachea and larynx contain a brownish, tough secretion. Lungs normal; only lower lobe of left lung infiltrated. Heart normal. In pericardium some drachms of reddish fluid. Liver and spleen apparently normal. Several inches around the umbilicus bloody suffusion, circular, between cutis and peritoneum. Recent extravasations in the cellular tissue of left supra-clavicular region. Below the normal thyroid gland, in the place of the thymus gland, lies a tumor, covering the anterior aspect of the heart, and but little covered by the lower portions of the lungs, firmly adhering to the pericardium and diaphragm. It contained much blood, and exhibited under the microscope the elements of the thymus gland. The immense enlargement of the thymus had not given rise to any morbid symptoms during life.

Pneumonia.—Of 48 cases, almost always complicated, (with abscesses, anæmia, gangrene, meningitis, syphilis, diarrhœa, etc.,) 35 died:

21 in 5 days.
7 in 10 "
2 in 20 "
3 in 30 "
1 in 2 months.
1 in 3 "

The infiltration occurred in the commencement in both lungs in	21 cases.
Only the right lung in	6 "
" left "	16 "
First in the left, afterwards right	2 "
" " right, " left	3 "

Interesting post-mortem Examinations.

1. Purulent (?) meningitis over the whole cerebral surface, except the upper surface of cerebellum. Enlarged spleen.

3. Tuberculosis of right lung. Cavity in lower lobe. Tuberculosis of bronchial glands and spleen.

3. Tuberculosis of pleura, both lungs, heart, liver, spleen, bronchial and mesenteric glands. Intestines not affected.

4. Acute hydrocephalus. Three ounces of reddish-dark fluid in the ventricles.

5. Craniotabes. Tuberculosis of apex of left lung. Hard, isolated excrescences on the valves of pulmonary artery.

The Italian Campaign of 1859. *Medico-Chirurgical Letters from General Head-Quarters.* By Dr. A. BERTHERAND, Principal Medical Officer of the First Class, etc., etc. Translated for the AMERICAN MEDICAL MONTHLY.

LETTER III.

Milan—The Greater Hospital—Temporary Branches—The Institute of Bréra—The Route from Milan to Brescia—The Goître in Lombardy—Sanitary Condition of the Army.

To PROFESSOR ROUCHER:

My Dear Friend—My letter of the 8th to our worthy colleague, Dr. Frison, closed amid the shouts of the enthusiastic welcome given us by the people of Milan. To add to the numerous accounts which have already reached you of this fairy-like reception, would be superfluous. Allow me, then, continuing my *rôle* of observer and physician, to lead you from the Corsi and the crowd which overflows them, to the more remote quarters of the city, where Lombard gratitude and charity have generously thrown open asylums to the victims of the field of honor. More than 6,000 wounded French and Austrians are already found gathered in the great city, and soon the glorious but bloody encounter of Melegnano will carry the figure up to 8,000. The most admirably ordered administration might certainly stand appalled! But no emergency can be too great for the sentiments of patriotism and devotion which exalt every Milanese heart. To the large hospitals and infirmaries of Maggiore, San Ambrogio, Fate Bene Fratelli, and Fate Bene Sorelli have been added, as if by magic, the temporary branches of San Lucca, Monastero Maggiore, Collegio San Filippo, etc. Benevolent commissions are organized among the more noted citizens; the most generous donations of bedding, linen and lint, pour in from every side. Physicians, superintendents, even laborers, all are at their post. In order to infuse as much order as possible into this immense service, all the Austrians, whether sick or wounded, are collected in the spacious halls of the San Francesco barracks. The generosity of the Emperor has liberated forty of their captured surgeons, on the sole condition that they shall continue their useful ministrations at that place. San Ambrogio, the ordinary military hospital of Milan, will be especially devoted to the necessities of the Sardinian army, while to the French are assigned the other hospitals which we have named, and those which it is still designed to open. Nor is this all.

To assure to each unfortunate those delicate attentions which, in

the hospitals of our own land, devolve upon the pious labor of the Sisters of St. Vincent de Paul, would necessitate the depopulation of all the convents in Lombardy, and even this holy *impressment* of the daughters of Heaven would not suffice for the emergency. But be reassured; the same public spirit which yesterday enrolled father and son under the banners of Garibaldi, impelling every arm as well as every heart to the conquest of national independence, will to-day recruit among mothers and beloved daughters, these auxiliary legions of religious devotion. Our wounded will soon tell you themselves of their hourly attentions, the constancy with which they dressed their wounds, proof against the heart-rending scenes of the hospital, and of those nameless alleviations, the potent secret of which woman's heart never so nobly divulged!

God forbid that among so many instances of assiduous care, of generous self-devotion, of kindnesses lavished without preference as they were without ostentation, I should be willing to establish degrees, to concentrate on certain of the guardian angels of our soldiers' couches of pain, the respect and admiration in which the gratitude of our army blends them all without distinction. And yet, how can I impose silence upon the memories of our visit to San Filippo, on the 10th of June? There, as everywhere, charity watched, ever alert, earnest, indefatigable. In one of the lower wards, occupied by those who were more severely wounded, two women that morning come from Melegnano, mother and daughter, both young and beautiful; the Marquess L. and the Comtess M. were bestowing their impromptu ministrations with a grace at once touching and sad. The severe mourning robes of the Marquess served to deepen the tinge of melancholy which marked her demeanor. It was evident that the echo of a cruel loss had inspired the heart of this noble mother with the heroism needful for the sad pilgrimage which she was to-day making, courageous, but heart-broken. Do but hear the Christian and sublime simplicity of her faith! "War, sir, snatched from me my eldest son: he died eight months since, from the effects of a ball received while fighting with your army at Sebastopol. When I learned that wounded Frenchmen had arrived at Milan, and that I could dress their wounds, I felt that God had sent me his first consolation."

The Greater Hospital, or Grand Civil Hospital, founded towards the middle of the fifteenth century, by the generous provisions of F. Sforza and Blanche Marie Visconte, his wife, commends itself by the spaciousness of its porticoes and courts. Several of its wards recall the appearance and height of the naves of our churches. Having its

rear on the Naviglio, its proximity to this canal affords inexhaustible supplies of water for the wants of its large population, (from 2,500 to 3,000 patients,) and insures the maintenance of a degree of cleanliness beyond anything that could be hoped for.

At the Greater Hospital, I had an opportunity of seeing—unfortunately the interview was a very brief one—the glorious wreck of the First Regiment of Zouaves, which left Algiers, so full, so brilliant, a few days before my own departure, and of which Melegno had just put *hors du combat* the colonel, thirty-three officers, and five hundred of its bravest soldiers! I regret, too, that lack of time prevented my meeting our worthy Milanese *confrères*, M. Gherini, the renowned operator, M. Cotta, those skillful physicians Griffini and Strambio, so honorably known from their connection with the medical press of Lombardy, and that phalanx of enlightened practitioners who are distributed through the numerous dependencies of the large civil and military hospitals of the city. To say that the important superintendence of this vast total of surgical departments is to be confided to the direction of our learned colleague, the principal Medical Officer, M. Cuvellier, is but to guarantee in advance the good management of an organization on which the Surgeon-in-Chief, Larrey, has bestowed so much anxious care. The army, if the fortunes of war so demand, will find behind it protection and shelter for more than eight thousand wounded.

Although it does not take rank among the Universities of Italy, the city of Milan has yet possessed, since the commencement of this century, an important Academic Institute, in which the principal branches of public instruction, the various sciences, letters, and the fine arts are represented. Pensioned members and amateur investigators are charged with the examination of useful discoveries and the perfecting of every line of study. Established in an old convent of the Jesuits, the Breva Palace, is interesting as much from its sculptural beauties, its library, its manuscripts, its pictures, its frescoes, its coins, its Observatory, and the rich collections of its botanical garden, as from its peculiar architecture. Imagine a spacious, quadrangular court, surrounded by two stories of arches, supported by double columns; opposite to the entrance, under a majestic vestibule, two stairways sending up their marble spirals, and reuniting at the next story on a common platform; on either side, two colossal statues, of Beccaria and Parini, and you will have a feeble idea of the impression of grandeur which one feels on entering this temple, raised in honor of genius, to the culture of the intellect. How much have I

regretted, my dear friend, in the midst of these wonders, my inability to handle the pencil! How grandly would a sketch of Breva have inspired you, in the plans which they tell me you are pursuing to elevate our Algiers Medical School from the humble cradle of its modest infancy! Designs by Richini and Piermanni, a few marbles by Marchesi and Monti, the funds secured in advance from our Algerian ediles, and you have, at one stroke, endowed our rising faculty with a monument worthy of its future destinies.

On the morning of the 12th we leave for Brescia. The air is damp and cold, the sky still heavy with clouds, which have darkened it regularly every evening since our arrival, and expend themselves during the night in violent storms. They call it only about twenty-five leagues from Milan to Brescia, and we must devote at least seven hours to the journey. Indeed, the Austrian army, fighting, as it retreats, before our advance guard, marches compact and in battle array. We are thus compelled to mass our entire force, and to advance in line, ready at any moment to give or to accept battle. When a hundred and twenty-five thousand men are thus thrown forward, followed by their baggage, their provisions, ambulances, artillery, munitions, reserves, etc., how is it possible to accomplish more than five to six miles in a march, over roads on which trains are hourly crossing each other's paths in inextricable confusion? This march by short stages, at the same time that it husbands the strength of the soldiers, gives us an opportunity to observe with a minuteness which cannot fail to be productive of useful results, the principal aspects and resources of the country.

The proverbial richness of the verdant plains of Lombardy justifies, perhaps even surpasses, their reputation. It is impossible to find fields more highly cultivated, greener meadows, more beautiful borders of mottled mulberries, or a more perfect system of irrigation. The design and first execution of the last belong, they assure us, to the Roman epoch. In striking contrast is the condition of the population of these regions, apparently so favored by Heaven. They appear wretched, emaciated, and in some places very generally affected by goitre. Is iodine, atmospheric air, or the saline element wanting in these beautiful waters, which, flowing always over beds of sand and gravel, come down so limpid and cool from the torrents and lakes of Upper Italy? Or must we attribute the prevalence of the disease to insufficiency of food, among the villagers of the interior, immovably devoted to their diet of *polenta*, (a porridge made from Indian corn?) As far as the influence of the water as an etiological agent is con-

cerned, the analysis of numerous specimens collected from Milan to the Lake of Guardo and the Mincio, by our learned colleague of the Medical School, M. De Lille, Prof. Brauwers, the Apothecary Major, and his zealous co-laborer of the ambulance corps of the General Head-Quarters, Assistant Apothecary, Major Viltard, will undoubtedly afford valuable elucidations of one of the most vexed problems of pathogeny. If I may rely upon a distinguished physician of Brescia, the goitre really exists as an endemic disease in Lombardy, only at the very feet of the southern slopes of the Alps, and almost exclusively in localities whose topographical situation prevents their receiving the atmospheric currents of the northern winds. It would certainly be a matter of interest to verify this statement.

The majority of the cities which we pass through—Gorgonzola, Cassano, Triviglio, Romano, Cava, Calcio, and Travagliato—possess small civil hospitals, sometimes founded long since, and supported by donations and special legacies, in old convents or in buildings erected for the purpose; sometimes temporary affairs, dating from the last epidemic of cholera, and situated in private houses, awaiting a definitive organization. Several among the first class, as those of Gorgonzola and Travagliato, possess considerable architectural importance. Completing their deficiencies by sub-hospitals in the barracks, churches, castles, and large private houses, each of these establishments will be enabled, in case of an engagement, to furnish hospital accommodations, though it be but temporarily, to five or six hundred men. We do not leave these various lodging-places without having personally informed ourselves of the means of transportation which the local administration can place at our disposal in case of need, and every evening I address a very circumstantial report to the Surgeon-in-Chief on this subject.

Despite a heat at times Algerian in its intensity, and a dust often stifling, the sanitary condition of the troops is excellent. We notice as yet only a few cases of gastric derangement of a remittent type, and quite a number of returns of intermittent disease among the soldiers who belong to African regiments. Two principal causes seem to me to contribute to this otherwise unimportant affection: 1st. The cold nights, the soldiers not being provided with blankets for the bivouac; 2d. The immoderate use of water and adulterated liquors.

The art of adulterating wines must have had its origin with the sutlers of armies. To manufacture wine on the spot is an effective

method of avoiding the expenses and risks of a difficult transportation.

R.—Of water from the nearest ditch,
Alum,
Beet-juice,
Amylic alcohol, (or any other cheap product of distillation,) āā., q. s., according to the vintage or brand required.
Mix in an *old* cask.

The recipe, you must grant, is expeditious, and besides, enables the maker to cheat the vigilance of the customs.

At last, here we are in Brescia—and undoubtedly likely to be for several days to come. My pen claims, in its turn, a little rest, after the long march that it has just accomplished. .

Trusting, nevertheless, that you will not, like myself, find it too long, believe me

Ever yours affectionately.

BRESCIA, *June 18th*, 1859.

REVIEWS AND BIBLIOGRAPHY.

Commentaries on the Surgery of the War in Portugal, Spain, France, and the Netherlands, from the Battle of Roliça, in 1808, *to that of Waterloo, in* 1815, *with Additions Relating to those in the Crimea in* 1854–1855. *Showing the Improvements made during and since that Period in the great Art and Science of Surgery on all the Subjects to which they relate. Revised to October*, 1855. By G. J. GUTHRIE, F.R.S. Sixth Edition. Philadelphia: J. B. Lippincott & Co. 1862.

A Treatise on Gunshot Wounds. By T. LONGMORE, Esq., Deputy Inspector-General of Hospitals; Professor of Military Surgery at Fort Pitt, Chatham. Philadelphia: J. B. Lippincott & Co. 1862.

On Bandaging and other Operations of Minor Surgery. By F. W. SARGENT, M.D., Member of the College of Physicians of Philadelphia, one of the Surgeons to Wills' Hospital, etc., etc. New Edition, with an Additional Chapter on Military Surgery, by W. F. ATLEE, M.D., and One Hundred and Eighty-Seven Illustrations. Philadelphia: Blanchard & Lea. 1861.

In placing the two first of these works within the reach of the American surgeon, Messrs. Lippincott & Co. have manifested that appreciation of the necessities of the hour which characterizes them

above all other publishers, and have rendered a very essential service to the profession. We consider it a decided mistake to suppose that because our regiments with their surgeons are all now in the field, and that preliminary knowledge of the hygiene of camps, so essential to the Army Surgeon, has been to some extent acquired, the demand for works of this description will necessarily decrease. On the contrary, although there may be a temporary cessation of the "rush" for them which existed last summer, we are fully convinced that the battle-fields which are now multiplying so rapidly throughout the whole breadth of our land, will afford material for surgical skill to be exerted here at home, which will lead many a practitioner who has previously devoted no attention to this particular branch of our science, to become a *military surgeon*. Love of country and of kind, if not of science, must produce this result. And apart from this immediate cause of demand, an interest has been aroused in all matters pertaining to the art of war, which will not die out with the death of the rebellion, or even of the generation. Henceforth no physician will consider his library complete without some work on the wounds of warfare on its shelves. And this book of the brave old Guthrie, whose enthusiasm in the cause of the "great art and science of surgery" fifty years could not dampen, (notwithstanding the playful allusion to Bob Acres in his preface to the first edition,) this book, we say, is precisely the one which from its comprehensive grasp, and its attention to the after-treatment of cases, will be a favorite in the wards of the military hospitals which the next few months will see so widely scattered throughout the North. The subject of gunshot wounds is taken up in the first chapter, and despite the slight alteration in the severity and character of these wounds, owing to the modern projectiles, we find little in the treatise of Mr. Longmore, as far as the matter of treatment goes, to add to the rules here laid down. The cold-water dressing, the absence of heating bandages, when necessary warm water, applied with piline, gutta percha, oiled silk, etc., (for ourselves we consider no material so efficient and so readily available as the piline,) constitute the simple directions for the treatment of the flesh wounds. The testimony against poultices is emphatic, but in our opinion not one whit too much so. "*No poultices should be permitted* in a military hospital until the principal surgeon is satisfied that they are necessary. They are generally cloaks for negligence, and *sure precursors of amputation* in all serious injuries of bones and joints." We are somewhat surprised to find SARGENT still clinging to

the poultice abomination, and elaborating an argument against the warm-water dressing, applied in any way, and the piline in particular.

At the close of this chapter, in speaking of the rarity of bayonet wounds, the author states a fact with regard to the use of that weapon, which, although not at all surgical, we cannot forbear quoting, for its honesty and pith, as well as to correct erroneous impressions, which we doubt not are shared by our own countrymen in common with his.

"A great delusion is cherished in Great Britain on the subject of the bayonet; a sort of monomania, very gratifying to the national vanity, but not quite in accordance with the matter of fact. Opposing regiments, when formed in line, and charging with fixed bayonets, never meet and struggle hand to hand and foot to foot, and this for the very best possible reason: that one side turns around and runs away as soon as the other comes near enough to do any possible mischief, doubtless considering that discretion is the better part of valor." Certain it is that the testimony of all military surgeons is to the effect that bayonet wounds are of extremely rare occurrence. Even Bertherand, who followed the bayoneting Zouaves in Italy, thought himself fortunate in seeing half a dozen cases after one of their severest battles.

Guthrie's lectures, being intended for a class of students or young practitioners, contain much that is elementary; one entire chapter, for example, being devoted to the anatomy of the arteries and collateral circulation. To the subject of wounds of arteries six chapters are given; rather an undue allowance, one would say, were it not that in the treatment of these wounds the author claims to have made important improvements; indeed, to have introduced the modern system of treatment, as opposed to that of Hunter, which had previously been followed. It is unnecessary here to repeat his propositions, founded on the different conditions of healthy and diseased arteries, which are well known to surgeons; suffice it to say that his claim, which we think is universally admitted, is to have introduced the method, 1st, of ligating the wounded artery *in the wound*, instead of at a distance from it on the cardiac side; and 2d, of ligating *both ends* of the divided vessel, the distal as well as the cardiac. The directions for the performance of the operation on all of the large trunks are minute and faithful, indicating a very careful study of the anatomical relations of the parts, and forming an excellent guide for the young or unaccustomed operator.

Lecture XXI., on Inflammatory Affections of the Thorax, might, in our opinion, better have been omitted. It is out of place in a

work on the *Surgery* of War, and its practice is simply shocking. If introduced into our army, we are convinced the results would be fearful. Bleeding with no other limit than syncope, antimony and calomel would be as efficient weapons as Minié balls in the destruction of our troops. The point, however, which he makes in regard to the harmlessness of air admitted into the healthy pleural cavity, as well as into the abdominal cavity, is one of importance, and greatly in advance of the times in which he made his observations. One feature of the book is the immense number of illustrative cases introduced, which, while they add to its interest, bear strong testimony to the extent of the author's experience. The impression which he produces on the mind of the reader is that of a master in his art and an original thinker. Mr. Longmore, on the other hand, while perfectly at home in his subject, seems to be rather a painstaking student and compiler. His work is an admirable *résumé* of the present state of our knowledge on this class of injuries, elegantly, concisely, and simply written, and methodically arranged. Its small size renders it an especially convenient manual for the surgeon in the field, for whose use it was probably intended. The author quotes Guthrie and McLeod freely, and shows great familiarity with all the modern writers on this department of surgery. In regard to the distinctive nature of the wounds produced by the modern projectiles, he says: "The change in form from the round to the prolonged cylindro-conoidal ball seems to derive its chief importance in surgery from the conical end possessing the mechanical characteristic of a wedge, while the former acted simply as an obtuse body. From this quality the power of penetration of conical bullets is greater, independent of the increased momentum imparted to them by the construction of the weapons from which they are discharged. Thus, supposing one of the old musket bullets to strike a limb at eighty yards, and an Enfield rifle conical bullet of the same weight at eight hundred yards, the rate of velocity being similar in each case, the injury from the latter may be considerably greater than that from the former, on account of its shape. The wedge-like quality of the conical bullet is rendered particularly obvious on its being driven into the shafts of the long bones of the extremities. The solid, osseous texture, of which the cylindrical portion of these bones is composed, is split up into fragments, having mainly a direction parallel with the central cavity, and fissures not infrequently extend from the seat of injury to their terminations in the joints, of which they form component parts. Such results were scarcely ever noticed, from the impulse

of the round balls. The bone might be comminuted, but the fragments were of a more cuboid shape, and the long fissuring did not occur. He is not inclined to attribute much importance to the spiral motion of the bullet; not as much, we think, as the physics of the case warrant. A ball rotating at the rate of seventy times a second must acquire a considerably increased power of penetration in consequence. The varying weights of bullets he considers of little importance. We have already alluded, in a notice of McLeod's and Bertherand's works, to the different impressions which these gentlemen received of the destructive power of conoidal balls, owing to the differences in the weight of those used by their opponents, the Russians employing a much heavier ball than the English, while those of both French and Austrians were still lighter than the latter.

Mr. Longmore's book is divided into two parts, the first of which treats of GUNSHOT WOUNDS IN GENERAL, and the second of GUNSHOT WOUNDS IN SPECIAL REGIONS; the latter considering separately and in the following order: wounds of the head, spine, face, chest, neck, abdomen, perineum, and genito-urinary organs and extremities. The section on gunshot wounds of the head is particularly valuable, and its division at once simple and practical. It is as follows: wounds of the scalp and pericranium—wounds complicated with fracture, but without depression on the cerebrum—wounds complicated with fracture and depression on the cerebrum—and with penetration of the cerebrum. In regard to the use of the trephine, he tells us that "the tendency of the most recent experience has been to limit the practice of trephining to the narrowest sphere," and we find concurrent evidence of this in every modern writer on military surgery. Although out of four operations at Brescia, during the Italian Campaign, three were successful, it is probable that the success was owing to their having been carefully selected from a large number of cases.

The immense importance of chloroform in military surgery is strongly insisted on by both writers, and Dr. Atlee concludes the little essay on gunshot wounds which he has appended to Dr. Sargent's work, by saying, "It must be concluded, therefore, that the advantages derived from the use of anæsthetics are even more evident and more appreciated in military than in civil practice." Longmore well remarks that "the quantity" of sulphuric ether "required to produce anæsthesia—from four to eight ounces—would render the use of this agent almost impracticable in extensive operations on the field," while the mortality from chloroform in hospital surgery "has been recently estimated at but one in 16,000."

The idea of the English Inspector-General, that "the smart of the knife is a powerful stimulant," is too absurd and too false to need to be more than noticed, and we are glad to find that his subordinates in the service did not suffer themselves to be deterred from endeavoring to mitigate "the smart of the knife" by employing chloroform whenever it was available, notwithstanding his ill-conceived caution. It seems that our own service is not the only one which has suffered from the incubus of an inefficient and anti-progressive head.

Sargent's little work has been a standard text-book for students ever since its first appearance, and we see no reason why it should not maintain its position. Its copious illustrations add not a little to its value, but we think the publishers do it injustice in having many of them so wretchedly executed. When good wood-cuts are to be had so cheaply, there is no excuse for introducing poor ones—faulty in design and rough in execution, in a scientific work. The chapter on gunshot wounds is a brief compend, following Longmore pretty closely, but by no means a substitute for his complete treatise, and, while very well in itself, we doubt if it will be found to add particularly to the sale or popularity of the book. ☞

Anatomy—Descriptive and Surgical. By H. GRAY, F.R.S., Fellow of the Royal College of Surgeons, and Lecturer on Anatomy at St. George's Hospital Medical School, &c., &c. Second American Edition, from the Revised and Enlarged London Edition: with Three Hundred and Ninety-Five Engravings on Wood. Philadelphia: Blanchard & Lea. 1862.

The second edition of this voluminous work has been issued by the indefatigable publishers, Messrs. Blanchard & Lea. In preparing this second edition, the author states that he has endeavored to correct any inaccuracies contained in the previous edition, every page being carefully revised, besides much new matter being added in connection with several new illustrations.

The object of this great work, whilst embracing the most detailed descriptive anatomy, is to delineate step by step the application of the science of anatomy to practical surgery. This all-important object has been obtained by introducing in small type, under their respective divisions, such practical and minute regional descriptions as serve to attract not only the mind of the student to the absolute necessity of an accurate anatomical knowledge of every operative region, but also

to refresh the memory of the surgeon who cannot constantly avail himself of practical detail in the dissecting-room.

But in introducing these most valuable surgical references, the beauty of the work has been marred by this very smallness of type mentioned in the preface to the first edition. In a work so voluminous in anatomical detail, the mere increase in size would not have been so great as to have rendered it unwieldy, or to have diminished its sale value, had the larger type been continued. The eye becomes annoyed (especially if the reader is not this side of forty) by following the lines so reduced in type and interval across a broad page. The same minuteness has been observed in the lettering of many of the plates, a magnifying-glass being at times necessary to enable one to read the name of the designated parts. Objections, we know, have been urged by some teachers of anatomy to this method of lettering on the part itself, the usual linear or numerical plan being preferred by them, as being, in their opinion, more instructive and exercising to the memory. In our view, this local lettering forms not only a most agreeable, but a most time-saving method, and cannot fail to recommend itself both to the student and practitioner. It not only demonstrates the part clearly without the trying search after lines or numbers, at times completely hid in printers' ink, but tends to cause a more accurate study of the engrouped portions similarly lettered.

The prominent anatomical features of this work are to be found in the early portion devoted to osteology, and the subsequent part assigned to the anatomy of the nervous system. The drawings in these, as indeed in other portions of the work, are unexceptionable. The various bones are illustrated by lettered engravings, which render distinctly cognizable the numerous processes and the attachments of the muscles. The latter are shown by dotted lines, and thus must necessarily aid the student in memorizing these important positions, whilst they form a comprehensive regional reference to the surgeon. By a knowledge of the attachments, and of the action of muscles, together with their linear markings on or below the surface, the surgeon is enabled to comprehend the nature of any particular dislocation, fracture, or deformity arising from or accompanied by muscular tension or relaxation. The muscular relations are also all essential to be remembered and recognized in the operation of ligaturing the greater vessels, or in the sections, or avoiding of section of the important nerves

In these points of view alone, this work on Descriptive Surgical Anatomy will become a necessary addition to the library of every surgeon, and will be found comprehensively reliable.

Under "Muscles and Fascia, Orbital Region," page 245, "the Surgical Anatomy" of the parts, as well as the method of operation to be pursued in convergent and divergent strabismus, is thus decribed: "The position and exact point of insertion of the tendons of the internal and external recti muscles into the globe should be carefully examined from the front of the eyeball, as the surgeon is often required to divide one or the other muscle for the cure of strabismus. In convergent strabismus, which is the most common form of the disease, the eye is turned inward, requiring the division of the internal rectus. In the divergent form, which is more rare, the eye is turned outwardly, the external rectus being especially implicated. The deformity produced in either case is considerable, and is easily remedied by division of one or the other muscle. This operation is readily effected by having the lids well separated by retractors held by an assistant; the eyeball being drawn outward, the conjunctiva should be raised by a pair of forceps and divided immediately beneath the lower border of the tendon of the internal rectus, a little behind its insertion into the sclerotica; the submucous areolar tissue is then divided, and into the small aperture thus made a blunt hook is passed upward between the muscle and the globe, and the tendon of the muscle and conjunctiva covering it divided by a pair of blunt-pointed scissors. Or the tendon may be divided by a subconjunctival incision: one blade of the scissors being passed upward between the tendon and the conjunctiva, and the other between the tendon and sclerotica. The student, when dissecting these muscles, should remove on one side of the subject the conjunctiva from the front of the eye, in order to see more accurately the position of these tendons, and on the opposite side the operation may be performed."

These descriptions, although intelligible, are not grammatically expressed. By reference to the above text, such changes of tense will be observed as, "this operation *is* readily effected," "the conjunctiva should be raised," "the submucous areolar tissue *is* then divided," "a blunt hook is passed," &c We would direct the author's attention to these inaccuracies of expresssion, that the ensuing editions may be purged from such faulty constructions of sentences. Also, at page 418, fifth line, under Arteries, we find the following: "*Each* vessel is directed to the back part of the corresponding bronchus, along which *they* run," &c. Such errors in a second edition are inexcusable, and seriously damage the value of a work intended as a text-book and designed as a necessary addition to the table library of every surgeon. We would also recommend that the directions for dissection should not

be included with the descriptive surgical anatomy, as in the paragraph just quoted.

The term "disease" is also frequently used in place of "affection." At page 256, under surgical anatomy in "wry neck" we find the following: "When all other remedies for the relief of this *disease* have failed, subcutaneous division of the muscle is resorted to." Does the author mean that all persons laboring under "wry neck" are always operated on by the attending physician or surgeon when other remedial means have proved ineffectual? The sentence being rendered "can be," or "should be," would probably define his views correctly. These errors of tense pervade the whole work, and we hope to find them corrected in future editions.

The directions for dissection are explicit, and cannot fail to serve in guiding the student as well as the "renovator" in the best method of "exhibiting" to be pursued.

Those portions devoted to the dissection and surgical anatomy of "Hernia" are most valuable. The directions and descriptions are comprehensive, and the parts involved are clearly and truthfully illustrated. The surgical anatomy of the various fractures forms a complete vade-mecum. The chief fractures are exhibited in the most satisfactory manner. These drawings cannot fail to impress on the attentive student the diagnostic differences of the various fractures, whilst the surgical treatments are fully described. Under this particular department are treated the fractures of the clavicle, (acromial, middle, and sternal,) Colles, (lower end of radius,) coracoid process, coronoid process of ulna, femur above condyles, below trochanters, neck, fibula, (with dislocation of the tibia called "Pott's,") humerus, anatomical neck, shaft, and surgical neck, olecranon process, patella, radius, shaft and ulna, tibia and shaft.

Under Surgical Anatomy of Arteries will be found, "of abdominal aorta and thoracic arch of aorta, anterior posterior tibial, axillary, brachial, common carotid, external and internal iliac, dorsalis pedis, fascial, femoral, innominate, lingual, popliteal, radial, subclavian, thyroid, temporal, and ulna arteries." Copious descriptions of the surgical anatomy of other portions of the body abound through the whole work. How valuable these lessons of reference will be found by the active surgeon, need only be proved by the want experienced by him when called suddenly on to operate, in not having access to works specially devoted to surgery. The illustrations will serve to refresh the memory, whilst the letter-engravings will not only save time, but designate clearly the regional distinctions of any selected part.

But in a work so copiously illustrated, and so voluminously descriptive, we should have anticipated that greater space would have been allotted to histology and microscopic delineation. Here and there we find a slight attention paid to these now so essential portions in a work devoted to descriptive and surgical anatomy. It is in vain to endeavor to describe minute structures intelligibly to a student, unless he is supplied with some representation of the elements so detailed. An author must not take for granted that the student already has such illustrations, or has seen the parts under the microscope. The author must assume that the student has no other work than his, and even if he has, that the correctness of prior illustrations should be verified or disproved by those in the late work he wishes to purchase or has already bought.

The completeness of this work, therefore, is marred, and we hope to find that these omissions have been corrected in the subsequent editions. While here we will add that a certain obscurity attends the arrangement of many of the sentences. Explicitness forms the chief value of any descriptive work, and should be especially found when treating so exact a subject as anatomy. The very attempt to condense has often rendered the author obscure and diffuse.

We are disposed to find fault at the hasty manner in which some of the most important subjects are treated. We will mention only one, viz.: the kidneys. Three pages comprise their whole descriptive anatomy. The epithelium of the tubuli uriniferi is stated to be of the spheroidal kind, when it has for years been shown to be of the pavement or tesselated variety. Nor are there any allusions to the uses of the Malpighian tufts, or any mention made of the fibrous matrix of the kidney, or of the arrangement of the minute vessels as they pass through the substance of the matrix, unless the author means the statement as to the sheaths to the vessels derived from the fibrous capsule to be so considered. We would suggest to the author before publishing another edition that he would procure a copy of the "Researches into the Structure and Physiology of the Kidney, by (late) Charles E. Isaacs, M.D., Demonstrator of Anatomy in the University of the City of New York, and read before the New York Academy of Medicine, March 5th, 1856."

A chapter devoted to the various kinds of epithelium would be an addition, and certainly an improvement to the work.

In thus exposing certain irregularities and imperfections, we do not wish to detract from the really great value of this splendid work of Dr. Gray, which will be found most comprehensively reliable by the stu-

dent, and of inestimable value to the surgeon. It is from our high consideration of its real merits that we wish to attract the author's attention to certain omissions, hoping in a future edition he will rectify them, and add other matter which will serve to enhance still more the value of his stupendous undertaking.

The getting up of this work is most creditable to the American publishers. The binding, paper, and type are unexceptionable. We finish by hoping that every student and surgeon in the land will procure a copy of a work that cannot fail to inure, from its faithful study, to their satisfaction and improvement. H. P. D.

Researches and Observations on Pelvic Hæmatocele. By J. BYRNE, M.D., M.R.C.S.E., Resident Fellow of the New York Academy of Medicine, etc. New York: William Wood, 61 Walker Street. 1862.

We listened with great interest to the reading of the author's paper before the Academy of Medicine, which forms the basis of the present monograph. In thus amplifying it, he has added essentially to the value of an already useful production. The loose character of the discussion which followed its reading, pelvic abscess and artificial anus being strangely dragged into it, was a sufficient proof of the necessity which existed for just such a careful and philosophic presentation of the subject as that before us.

Reviewing the somewhat meagre annals of the affection in question, as found in both English and French authors, Dr. Byrne presents succinctly the opinions of the more eminent of them, making them the subject of an intelligent criticism, and modestly states his grounds for differing with them on some important points of pathology and treatment, sustaining his own views by reference to cases occurring in his own experience or that of other practitioners. He considers that the extravasation is generally external to the peritoneum, and speaks thus of the opposite opinion of M. Voisin:

"In acknowledging but this one form of hæmatocele, that author goes so far as to say, that a bloody tumor in any other situation outside the recto-uterine *cul-de-sac* is not the result of menstrual disorder, does not necessarily occur at a catamenial period, but must be the consequence of some injury, and should, therefore, be designated as *thrombus*. This is truly 'a distinction without a difference,' except in so far as the fate of the patient is concerned, and entirely op-

posed to the opinions of Richet, Scanzoni, Nonat, Prost, and other high authorities, worthy of more consideration than seems to have been accorded by Voisin. Moreover, a careful perusal of the cases collected by this author must convince any impartial reader that many of them offer examples of that very form of hæmatocele which he seems to ignore."

The fact that post-mortem appearances so often indicate the reverse, he attributes to the fact that the intra-peritoneal form is so much more fatal. His definition is as follows:

"The tumor to which the term hæmatocele, or hæmatoma, has been correctly applied, may be defined *an extravasation of blood into or beneath the pelvic peritoneum;* and on account of the space in which this form of tumor has been, for the most part, noticed, it has generally been described as 'recto-uterine,' 'retro-uterine,' or 'peri-uterine.' *But, as the extravasated fluid does not invariably select either of the locations thus indicated,* the more correct, and at the same time comprehensive term, of *pelvic hæmatocele* should, I think, be used, as it includes every form of this affection, whether intra or sub-peritoneal, diffused or encysted. The following case, which has come under my own observation, may more clearly elucidate what I mean.

"*Case* I.—A lady, aged 21, of robust habit and good constitution, was married at the age of 16, and has given birth to three children. In her first labor she had convulsions, and was delivered of a well-formed, but dead child, by forceps. She soon recovered, however, without any unfavorable symptom other than might be anticipated in such a case; her second confinement was natural in every respect, but on the third day she was taken with chills and symptoms of metro-peritonitis, from which she also quickly recovered, and enjoyed excellent health up to her third labor. Her convalescence on this occasion was uninterrupted, except that she complained of a continual soreness in the right ovarian region, first noticed when she commenced to sit up. At the expiration of three weeks—this pain still continuing—she ventured out, but had not gone far before she was seized with most acute suffering or 'cramp,' as she termed it, in the lower portion of her abdomen, accompanied with tenesmus and difficult micturition.

"These symptoms gradually subsided under proper antiphlogistic treatment, but the original pain remained as before, and continued, with occasional remissions, for the following nine months, when, during an unusually severe paroxysm, she felt as if something had given way, and soon after discovered a *firm* tumor occupying the right ovarian region; the swelling was about the size of a turkey's egg, and

tender to the touch. She was not nursing, and menstruation was perfectly regular. After three or four months the tumor became less sensitive and smaller, and in less than twelve months there was no trace of it to be found, and her health improved rapidly. The principal treatment consisted in counter-irritation, and the internal and topical use of iodine."

With the view of its location which he assumes, he, of course, cannot refer it to disordered menstruation as a frequent cause. He rather supposes it to be due to a varicose condition of the ovario-uterine vessels, the result of ovarian inflammation. Other causes may operate, but this is by far the most frequent. The exciting cause is any condition, whether mental or physical, which tends to a sudden active congestion of the internal organs of generation.

The *symptoms* of hæmorrhage taking place from the under surface of the ovary, or within the folds of the broad ligament, are detailed as follows:

"The patient having previously suffered more than usual from pain in one or other iliac region, will complain suddenly of severe cramp in the lower portion of the bowels, accompanied or soon followed by tenesmus, and weight referred to the loins and sacrum; there may be painful and difficult micturition, and if the quantity of blood poured out be great, faintness, and even complete syncope, may now take place; the skin assumes a pale or sometimes anæmic hue; the extremities become cold, the countenance anxious, pulse small and frequent, and the abdomen tympanitic, and very sensible to pressure, particularly over the seat of the rupture. At this stage of the case, a vaginal examination will rarely fail to detect a tolerably firm and irregular tumor, somewhat painful to the touch, and situated directly behind, or to either side of the uterus."

We wish that we had space for the very interesting history which is given of a case illustrative of this phase of the disease—interesting alike from the care with which the symptoms are described, and the practical value of the narration of the different steps of the treatment, its failures, reverses, and final success.

The intra-peritoneal hæmatocele, on the other hand, is characterized by a much more startling set of symptoms from the moment of the effusion of the blood.

"The pain referred to the hypogastrium will be more intense, and the collapse more complete and enduring; the abdomen rapidly becomes tympanitic, and vomiting of brown or dark grumous liquid, now incessant, adds much to the distress of the pati··· ; the pulse, if per-

ceptible, is very small and rapid, and the features assume a Hippocratic expression. Voisin, referring to the frequent absence of premonitory signs indicative of the occurrence, says that 'the suddenness of the symptoms has sometimes led to the suspicion of poisoning.'

"The following case I assume to be an example of fatal intra-peritoneal extravasation:

"*Case* II.—On the 13th of last September I was sent for to see Mrs. L., aged 34 years, a widow, and the mother of two children, aged respectively, seven and five years; she was of delicate, but apparently healthy constitution; had always menstruated regularly, but said her last three 'turns' were attended with a good deal of suffering, and in the intervals she had complained much of pain in the right side, which never left her, but was particularly severe for some days before and after the 'flow.' For the last three days this pain has been gradually getting worse, until now she cannot bear the slightest pressure over the part affected; she says she would have consulted me sooner, but supposed every moment she might get relief by the appearance of her courses.

"The patient lies with her legs drawn up, and on the affected side; the situation of the pain is the right iliac fossa, and a little towards the centre; there is no noticeable swelling of the abdomen, but it is acutely sensitive over the affected part; pulse 112, and sharp; tongue furred, but moist; the bowels were opened by castor oil in the morning. Ordered twelve leeches, to be followed by warm fomentations and a powder containing two grains of calomel and one of opium every three hours. *Sept.* 14.—Feels much relieved, and tenderness in the side almost gone; the catamenia appeared this morning; pulse 90, and soft. Within one week the patient expressed herself as perfectly well, and continued so up to the 18th of November.

"The catamenial period succeeding her former illness passed over without pain or inconvenience, but this time it was attended with great distress, and suddenly ceased during the night, when her sufferings became greater, and soon after she was seized by a most acute 'cramp' in the lower part of her abdomen and right side. A few hours after this occurrence I saw her, when she presented the appearance of a patient in the last stage of Asiatic cholera; the skin was of a bluish or leaden hue, extremities cold, countenance anxious; pulse 130, and thready; abdomen tympanitic and intensely painful to the touch, and vomiting constant. Stimulants and restoratives failed to produce reaction, and she died within a few hours. I regret to be

unable to say more about this interesting case, as neither a post-mortem nor even a vaginal examination would be permitted."

With regard to diagnosis, these tumors are to be distinguished from those dependent upon purulent effusions and extra-uterine pregnancy, by the rapidity with which they are formed; from retroversion of the womb, by the use of the uterine sound; from ovarian cysts, by the comparative isolation and mobility of the latter; from malignant or fibrous growths, by the history of the case. In many cases, however, nothing but the exploratory trocar will enable us to come to a certain decision. The treatment, the author considers, should be *preventive*, directed against inflammation of the ovaries; *palliative*, following up the last; and *curative*, which consists in puncture with a large trocar, *not* to be followed by irritating injections. He says emphatically:

"*I am fully satisfied that, in a retro-uterine hæmatocele of any considerable magnitude, it would be safer to penetrate the tumor twenty times, than to 'always rely on absorption.'*"

The following are the propositions which are appended to the paper read before the Academy:

"*First*, that bloody tumors within the female pelvis are not met with *frequently*, and should not be confounded with pelvic cellulitis or its consequences. *Second*, that the relative location of the tumor is not an infallible guide in determining as to its intra- or sub-peritoneal character. *Third*, that certain pathological principles and physiological phenomena inseparable from such inquiries make it, at least, very probable that the *causes* which predispose to the two forms of hæmatocele are not only entirely distinct, but differ from each other as widely as pleurisy and pneumonia; and *fourth*, when inflammatory action precedes these hæmorrhages, the character and seat of said inflammation determine the location of the effused mass."

In respect to causation by "*disordered menstruation*," Dr. B. forcibly says:

"If, in a case of pulmonary hæmorrhage, the subject of which presented all the external as well as auscultatory evidences of phthisis, or in that of rust-colored expectoration consequent upon an attack of pneumonia, we should attempt to explain these symptoms by gravely asserting that they were the result of disordered bronchial secretion, what light would thus be thrown upon the true nature of either condition? And yet, 'disordered menstruation,' and the affection under consideration, can hardly be said to bear any closer relation as cause and effect."

"The opinion that in subperitoneal hæmatocele the vaginal tumor is lateral, while in the intra-peritoneal form it is central, he considers that he has disproved by experiment on the dead body; water injected into an opening in the superior fold of the broad ligament, on the left side, and at a little distance from the inferior border of the ovary, forming at once "a large *central retro-uterine swelling*."

The fact that four-fifths of the authenticated cases occur in women who have borne children leads to the inquiry whether the utero-ovarian veins may not become permanently dilated as a "*necessary consequence of pregnancy*," and whether in these cases ovarian inflammation be not properly *ovarian phlebitis*?

The question is an interesting and ingenious one, but, of course, needs much investigation and exploration before it can be decided in either way.

We have thus endeavored to give our readers some idea of this timely little essay, not to enable them to dispense with, but to induce them to procure it. We feel sure that they will consider themselves well repaid for so doing.

Hand-Book of Surgical Operations. By STEPHEN SMITH, M.D., Surgeon to Bellevue Hospital. New York: Baillière Brothers, 440 Broadway. 12mo, pp. 253 and viii.; Index, pp. 17.

This is an unpretending, but really useful, little work. Although its nature and purpose preclude claims of originality, Dr. Smith has most creditably performed the difficult task of furnishing "a pocket companion containing the details of the more common as well as the important operations in surgery." Having been prepared, as we are informed, at the suggestion of friends who early entered the medical staff of the Volunteer Army, it "is limited to those branches of operative surgery which are of the most importance to the military surgeon." This fact undoubtedly makes it more particularly welcome, in these times. The author's personal views as to the bounds of the limits thus laid down seem to have led, however, to some omissions which we regret. The volume would not have been rendered any less convenient or portable by adding brief directions for performing operations which, when at all required, admit of no long delay or preparation; f. i., that for hernia, tracheotomy, etc. For the same reason, we should have preferred a little more space to have been devoted to the subject of hæmorrhage, even to the abbreviation or entire exclu-

sion of such subjects as vaccination. There can be, it seems to us, no question but what the course indicated would have rendered the work still more serviceable to the military surgeon, who, the author says, "must either encumber himself with the large treatises on general and operative surgery, [since the commencement of the rebellion some half dozen hand-books of military surgery have been published among us, however, for his use,] or rely upon his unaided memory in the emergencies of the service"—*as well as* to "the surgeon in civil and hospital practice," to whom the work is also offered, with the assurance, "it is believed that it will prove to this class of practitioners a useful and acceptable aid to the memory." Accidentally opening the book at p. 15, we could, to be severely critical, greatly find fault with the author, who, speaking of inserting the wire suture, pictures and describes both Lister's and Price's needles, and makes no mention of the simple and efficient needle now so largely used in this city, and recently presented to the Academy of Medicine by Dr. Gardner; and describing the various forms of sutures, makes no mention of Higginson's substitute, of arming the margins of a wound with strips, and stitching these together.

But if from such remarks our readers were to conclude that we have formed an unfavorable opinion of this hand-book, they would err; on the contrary, we can assure them that the most searching criticism leads to the highest appreciation of Dr. Smith's labors. Within the limits that he has prescribed for himself, not only has he endeavored "to embrace the greatest number of subjects, to arrange them in the best form for reference, and to give the largest amount of practical details, anatomical and operative," but he has also *admirably succeeded* in presenting a mass of facts and practical hints, of exceedingly great value to operators of even greater experience than those for whom the book is in the first place intended. We have neither space nor time to enter into a detailed review, but may state that the volume contains six chapters. The 1st, entitled "Minor Surgery," treats of Instruments, with the manner of holding the scalpel and bistoury, and making incisions; union of wounds; dressings, embracing bandaging, strapping, lint, and application of water; hæmorrhage; blood-letting; counter-irritants; vaccination; and anæsthetics. Chapter 2nd is on the arteries; especially thorough on their surgical anatomy and ligation. Chapter 3d is on the veins, wounded and varicose. The next two chapters are respectively on amputations and resections; they form the major part of the volume, and as a practical summary of these subjects, we do not withhold from them

our unqualified approbation. In Chapter 6th, "Gunshot Wounds," Dr. Smith, "not presuming to discuss these subjects from the standpoint of civil practice," judiciously furnishes an abstract of Prof. Longmore's treatise, noticed on page 450 of this Journal.

A distinguishing excellence of the Hand-Book is the large number of pictorial illustrations, embracing both the most approved instruments and modes of performing the operations discussed. *

EDITORIAL AND MISCELLANEOUS.

— We desire respectfully to call the attention of all to whom the notice applies, to the urgent request of the publishers of the MONTHLY, fronting the first page of this month's issue, and to supplement it with the expression of our earnest desire that it may receive from our friends and readers a prompt response.

In these days of civil war, with all its blighting effects, necessitating retrenchment and economy, and giving promise of future high taxes, journalism, and especially medical journalism, is not a lucrative avocation. The publishers do not, therefore, call upon our subscribers to pay up promptly with any expectation of filling their own coffers, but merely from a desire to be able, as always heretofore, to discharge honorably and promptly the just obligations of the MONTHLY. If subscribers do not pay the printer gets no money, and if the printer be not paid subscribers in their turn will fail to receive the monthly "feast of good things," which the editors have ever endeavored to set before them. The chain of argument is brief, but irrefragable.

We point with confidence to the seventeen volumes of the MONTHLY as evidence that we have never in the past spared any pains to make the MONTHLY a vehicle of valuable medical knowledge and information, as well as an interesting and readable journal, and we have the satisfaction to know, from numerous letters received from time to time, that our efforts are not unappreciated by our readers, and that the MONTHLY is a welcome visitant to many laborious members of the profession. Therefore, counting confidently upon the generous support of our friends, we gladly pledge ourselves to continue to labor assiduously in the future for their benefit and advantage, and to maintain the reputation of our journal if they, on their part, will but discharge the single plain duty that devolves upon them.

— UNIVERSAL SOCIETY OF OPHTHALMOLOGY.—The object of this Society is to advance the science of Ophthalmology by yearly meetings, establishing a pathological collection, and publishing transactions. It is to change its seat of action yearly from one to another of the great scientific centres of the world. Eleven such centres, all of them European, have so far been selected. The most celebrated names figure in its lists of committees, such as Sichel, Desmarres, Von Graefe, Bowman, Arlt, Mackenzie, Wilde, etc., etc. We learn that Drs. Valentine Mott and Julius Homberger, of this city, and Drs. Pancoast, Hays and Little, of Philadelphia, compose the American Committees.

The first meeting of the Society will be held at Paris, between September 30th and October 3d, of this year; and the Central (Parisian) Committee has issued a request to the governments of all civilized nations to send delegates to its sessions. We presume the American Committees will soon officially invite all parties interested to participate.

— NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL.—Dr. R. K. BROWNE having been appointed Brigadier Surgeon in the Army, has resigned the Chair of Physiology and Microscopic Anatomy in this institution. We understand that the Professorship is now vacant.

—"Some time since, it may be recollected, we called attention to an error in the last English edition of 'Samuel Cooper's Dictionary of Surgery.'

"In the *British Medical Journal* of April 12th, Mr. J. E. Erichsen, the distinguished surgeon of London, published the following satisfactory explanation:

"'*The First Ligature of the Internal Iliac Artery in the United States.*—SIR: In the last number of the *Journal*, under the heading of "A Slight Error," it is stated that I have, in the last edition of *Cooper's Surgical Dictionary*, attributed to "Mr. Hudson, of New York," instead of to "Dr. S. P. White, formerly of Hudson, in the State of New York," the merit of having first tied the internal iliac artery in the United States of America. The error is not mine, but Mr. Cooper's. It occurs in the edition of 1838, from which the new issue of the *Dictionary* has been compiled, etc.

"'I am, etc., JOHN E. ERICHSEN.

"'6 CAVENDISH PLACE, *April* 8, 1862.'

"We avail ourselves of this opportunity to correct a few other errors in relation to this important and difficult operation. Mons. Velpeau, the celebrated surgeon of Paris, in his valuable and elaborate work on surgery, attributes the operation in one place to Samuel White, and in another to M. P. White. Dr. Mott, in his notes, gives

it correctly to Dr. S. P. White. Lecturers in our Medical Colleges, when alluding to the subject, have often spoken of it as the ligature to the common iliac artery instead of the internal iliac artery. It is very curious that the error should have lain uncorrected for twenty-four years in Cooper's Surgical Dictionary, and it can only be accounted for on the ground that the American edition is principally used in the United States. It is strange, also, that the British Journal should denominate it a 'slight error.' It ought not certainly to be considered in that light by the gentleman who really performed the operation."—*American Medical Times.*

As stated in the article on *Aneurism* in *Cooper's Surgical Dictionary*, "the Emperor Alexander conferred a pension on an English surgeon in the Russian Army, as a reward for his skill and dexterity, in successfully performing this operation upon one of his subjects." If our Government should be disposed to show the same grateful liberality,—and such governmental recognition is well deserved by the operator,—it would indeed be more than a "slight error" if it should be granted to any "Mr. Hudson." We may add, that it is now about thirty-four years since Dr. White performed this operation upon an aged soldier of the Revolutionary War, and saved his life from impending death by hæmorrhage. He attended the man with great assiduity, and at a distance from his residence; and the only pension or remuneration he ever received was (considerable, to be sure,) *the satisfaction of curing his patient.*

— Medical Reviewing.—The late application for criminal information against the *London Lancet* on the part of Dr. Hastings, author of a work in which he stated that he had discovered a remedy for the cure of consumption by the use of the excrement of snakes and reptiles, suggests, says the *Medical Times and Gazette*, "a word or two on the subject of medical reviewing. The professional man who reviews a medical book is not in the position of an ordinary critic. Besides the common duties and responsibilities of criticism, he has two obligations which are binding on him: the one is to protect the public from quackery and charlatanism; the other to direct and guide, as far as his talents and acquirements permit, the profession to whom the law intrusts life and health. It would be in the highest degree criminal were he to show fear or favor. The author who sends a book to a medical journal for review voluntarily submits it to the ordeal. If it contain anything contrary to common sense or to scientific teaching, he must be content to bear the brunt to which he has of his own accord exposed himself. In our judgment, also, the medical reviewer has a

perfect right to give currency to any opinion he may have honestly formed as to the author's previous scientific attainments and standing, if by so doing he enable the reader to form a more just estimate of the value of observations or theories advanced. We are glad to see the firm stand made by the judges on the occasion of Dr. Hastings' application. It is evident they estimated the reptilian therapeutics at what they are worth. By their decision they have at once vindicated the general freedom of the press and the especial prerogatives of legitimate medical criticism." That these remarks as to the rights and duties of the medical reviewer accord with our own convictions and practice, it is needless, we trust, to assure our readers. We heartily commend this paragraph to the attention of both writers and publishers.

— MEDICAL RESPONSIBILITY.—ACTION FOR MALPRAXIS.—The question of medical responsibility has been stated with some precision in a judgment delivered by the Tribunal of the Seine in an action for malpraxis in which the damages were laid at 10,000 francs; being, in fact, a cross action in reply to one on the part of the doctor for payment of his fees. The nature of the case is not detailed in the report, the fact of the patient remaining lame after treatment being alone stated. The judgment affirms that medical practitioners must not be rendered responsible on account of the manner in which they have thought proper to operate, the mode or system of treatment they have adopted, or the external applications which they have in certain cases had recourse to—all these questions coming within the domain of practice and science. They must not, however, shelter themselves under this principle when it has been established that they have acted with gross want of skill or carelessness, and contrary to the rules of art and the conclusions of science. The *experts* (MM. Velpeau, Michon, and Boys de Loury,) while admitting the reality of the infirmity complained of, declared that it was caused by no fault of the practitioner, and the bill of 500 francs was ordered to be paid, together with all expenses. The *L'Union Médicale* points out how important it is in the appointment of *experts* that they should be instructed to apply the above principle, which would require the proof of gross want of skill, to insure the conviction of a practitioner. Too often it happens that the *experts* are only instructed to inquire whether he has committed a fault, and if they disagree with him on some point of treatment, that, in their eyes, constitutes a fault.

— EXTRAORDINARY ACCIDENT TO A CHILD WITHOUT ILL EFFECTS.—M. Josat gives an account of the miraculous escape of a child from the

consequences of a frightful accident. This infant, aged twenty-nine months, playing at a window of a house, No. 30 *Rue de la Paix, Paris*, lost its balance and fell out from a *height of five stories*, striking a hat from the hand of a hatter, who was carrying it home. He lifted the child gently from the pavement and carried it into the house, when after a few minutes the infant heaved a sigh, and then uttered a small doleful cry. All the functions were gradually re-established, and it was found that there was neither fracture or dislocation. A week after, the child was found playing and merry, as well as ever; the only traces of any accident being three broken incisors of the upper jaw, and much ecchymosis of the eyelids.

— The Pamard Affair.—We have more than once alluded to this singular occurrence, in which a Dr. Pamard, Deputy to the Chambers for Avignon, has been accused of appropriating a membership of the Academy of Medicine which was really conferred on his father, at whose death he seems to have taken it as son and heir. The *Indépendance Belge* first set on foot the report of the transaction, and this was copied into various French newspapers, the proprietors of which were duly prosecuted and punished. We find any further remarks of our own must be very guarded, lest we bring ourselves within the terrors of the French law; for it seems now that the *Indépendance Belge* itself has been cited to appear before the French tribunals, and that there are French lawyers who think that it may be forced to do so! A *casus belli*, at the very least, may arise. All this time the Academy is silent, not being able, owing to the disgraceful laxity with which its records have been kept, to state who really was elected, father or son!—*London Med. Times and Gaz.*

— New Chairs at the Paris Faculty of Medicine.—"As a specimen of how even good actions are sometimes done by the French Government in the most repulsive because the most despotic manner, we may note the establishment of two new chairs at the Faculty of Medicine. No member of the Faculty was consulted, and no intimation given to that body until the decree was published in the *Moniteur*, establishing chairs of Comparative Medicine and Histology, and nominating the first occupants, viz., M. Rayer for the former, and M. Robin for the latter. This last nomination must call for unanimous approval, fallen as it has upon one of the most distinguished microscopists, who has done much to retrieve the backward condition of histology in France. As to M. Rayer, with a large practice, and advanced in years as he is, it has excited some surprise that he has taken the post, especially as he has also been appointed

to the onerous office of Dean of the Faculty, (by the same absolute decree,) in place of M. Paul Dubois, resigned. The sudden surprise of the Faculty at the appointment has given rise to the witticism that his body has been struck by a *coup de cannon rayé*, (rifled.")—*London Medical Times and Gazette.*

— HYDROPHOBIA.—In the month of February last we gave an account of a young girl having been attacked by a wolf at Breil, in the arrondissement of Nice, and of her being saved by the courage of a brigadier named Dellerba. We regret to announce that the latter has just died a victim to his devotedness. The wounds which he received in his struggle with the animal were healing favorably, and his complete recovery was looked on as certain, when, about a week ago, fifty days after the event, symptoms of hydrophobia came on, and he died two days afterwards in a fearful paroxysm of madness.—*Galignani's Messenger.*

— CONSERVATORY IN THE CENTRAL PARK OF NEW YORK.—We perceive that the Central Park Commissioners have contracted with Messrs. Parsons & Co., of Flushing, for the construction of a grand conservatory, the largest in the United States, upon the Park grounds. The building is to be a "Crystal Palace" of iron and glass, 200 feet long, 70 feet wide, and about 50 feet high. Its base will be a parallelogram, and there will be three stories, curving inward like the successive folds of a turban. The conservatory will front Fifth Avenue; its centre being opposite Seventy-Fourth Street; and directly in its rear will be a beautiful little pond, with walled sides of a symmetrical shape, which will be built during the coming two years. When the Fifth Avenue is graded to its proper height, it will be on a level with the second story of the proposed conservatory, and the main entrance to the edifice will therefore be on that story. Stairs and balconies will give access to every portion of the building. The contract provides that the grantees must erect the building entirely at their own expense, after the plans already agreed upon; that they must place in it nothing but flowers or rare trees or plants; that they shall be allowed to sell bouquets, &c., to visitors; that the public shall always be admitted free; that good order shall always be maintained inside, at the expense of the grantees; and that the work shall be completed by the 1st of January, 1864. The specifications of the contract are minute, and are believed to cover the objections which might be made to the granting of a monopoly of such a character. The grantees, on their parts, agree to pay a rent which will add considerably to the revenues of the Park. The conservatory will cost about $50,000.